CDX-L550/L550V/L550X

SERVICE MANUAL

Ver 1.1 2001. 06

AEP Model
UK Model
CDX-L550/L550V/L550X
E Model
CDX-L550

Photo: CDX-L550X

• The tuner and CD sections have no adjustments.

Model Name Using Similar Mechanism	NEW
CD Drive Mechanism Type	MG-393X-121//Q
Optical Pick-up Name	KSS-720A

SPECIFICATIONS

CD player section

Signal-to-noise ratio	90 dB
Frequency response	10 – 20,000 Hz
Wow and flutter	Below measurable limit

Tuner section

FM

Tuning range	87.5 – 108.0 MHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz/450 kHz
Usable sensitivity	8 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	66 dB (stereo), 72 dB (mono)
Harmonic distortion at 1 kHz	0.6% (stereo), 0.3% (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz

MW/LW

Tuning range	MW: 531 – 1,602 kHz LW: 153 – 279 kHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz/450 kHz
Sensitivity	MW: 30 µV LW: 40 µV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	50 W × 4 (at 4 ohms)

General

Outputs	Audio outputs Power aerial relay control lead Power amplifier control lead
Inputs	Telephone ATT control lead Remote controller input connector Aerial input connector
Tone controls	Bass ±8 dB at 100 Hz Treble ±8 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 178 × 50 × 177 mm (w/h/d)
Mounting dimension	Approx. 182 × 53 × 161 mm (w/h/d)
Mass	Approx. 1.2 kg
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1)

Design and specifications are subject to change without notice.

FM/MW/LW COMPACT DISC PLAYER

9-870-256-12
2001F0400-1
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Sony Corporation
e Vehicle Company
Shinagawa Tec Service Manual Production Group

SONY®

SERVICE NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

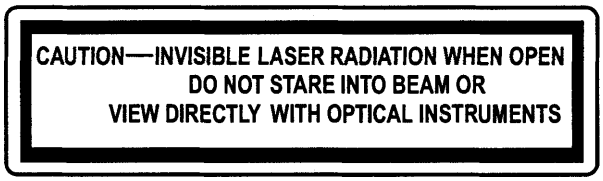
The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

Notes on Chip Component Replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

AEP/UK model:

This label is located on the bottom of the chassis.



This label is located on the drive unit's internal chassis.

When replacing the chassis (T.U) of mechanism deck which have the “CAUTION LABEL” attached, please be sure to put a new CAUTION LABEL (3-223-913-11) to the chassis (T.U).

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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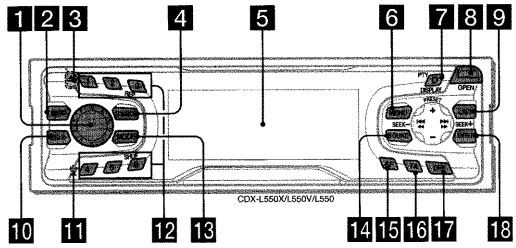
SECTION 1
GENERAL

This section is extracted from instruction manual.

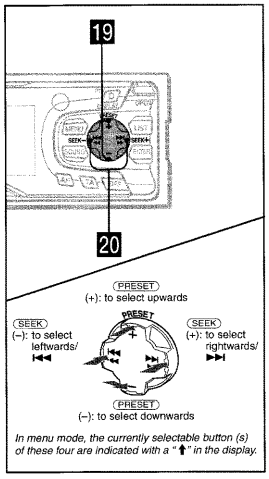
Location of controls

Refer to the pages listed for details.
CD : During Playback RADIO : During radio reception MENU : During menu mode



1 **Volume control dial** 14
2 **MBP button** 19
3 **⏏ (eject) button** (located on the front side of the unit, behind the front panel) 9
4 **SOURCE (Power on/Radio/CD) button** 8, 9, 10, 11, 14, 20
5 **Display window**
6 **MENU button** 8, 10, 14, 16, 19, 20
7 **D (DISPLAY/PTY) button** 9, 12, 15
8 **OPEN button** 7, 9
9 **LIST button**
RADIO 12
10 **EQ7 button** 20
11 **RESET button** (located on the front side of the unit, behind the front panel) 7
12 **Number buttons**
CD
③ **REP** 10
⑥ **SHUF** 10
RADIO 10, 11, 13, 14
13 **MODE button**
RADIO 10, 11, 14
14 **SOUND button** 18, 19
15 **AF button** 13, 14
16 **TA button** 14
17 **OFF (Stop/Power off) button*** 7, 9
18 **ENTER button**
RADIO 12
MENU 8, 10, 14, 15, 16, 19, 20

* **Warning when installing in a car without an ACC (accessory) position on the ignition switch**
After turning off the ignition, be sure to press (OFF) on the unit for 2 seconds to turn off the clock display.
Otherwise, the clock display does not turn off and this causes battery drain.



19 **PRESET buttons (+/–)**
RADIO 11, 12, 15
MENU 8, 10, 14, 16, 19, 20
20 **SEEK buttons (–/+)**
CD 9
RADIO 11, 13
MENU 8, 16, 18, 19, 20

Precautions

- If your car was parked in direct sunlight, allow the unit to cool off before operating it.
- Power aerials will extend automatically while the unit is operating.

If you have any questions or problems concerning your unit that are not covered in this manual, please consult your nearest Sony dealer.

Moisture condensation

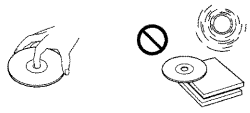
On a rainy day or in a very damp area, moisture condensation may occur inside the lenses and display of the unit. Should this occur, the unit will not operate properly. In such a case, remove the disc and wait for about an hour until the moisture has evaporated.

To maintain high sound quality

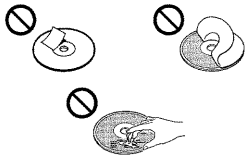
Be careful not to splash juice or other soft drinks onto the unit or discs.

Notes on discs

- To keep the disc clean, do not touch the surface. Handle the disc by its edge.
- Keep your discs in their cases or disc magazines when not in use.
Do not subject the discs to heat/high temperature. Avoid leaving them in parked cars or on dashboards/rear trays.



- Do not attach labels, or use discs with sticky ink/residue. Such discs may stop spinning when used, causing a malfunction, or may ruin the disc.



- Discs with special shapes (heart-shaped discs, octagonal discs, etc.) cannot be played on this unit. Attempting to do so may damage the unit. Do not use such discs.
- You cannot play 8cm CDs.
- Before playing, clean the discs with a commercially available cleaning cloth. Wipe each disc from the centre out. Do not use solvents such as benzine, thinner, commercially available cleaners, or antistatic spray intended for analog discs.

Notes on CD-R discs

- You can play CD-Rs (recordable CDs) designed for audio use on this unit.
Look for this mark to distinguish CD-Rs for audio use.

This mark denotes that a disc is not for audio use.

- Some CD-Rs (depending on the equipment used for its recording or the condition of the disc) may not play on this unit.
- You cannot play a CD-R that is not finalized*.

* *A process necessary for a recorded CD-R disc to be played on the audio CD player.*

Getting Started

Resetting the unit

Before operating the unit for the first time or after replacing the car battery, you must reset the unit.
Remove the front panel and press the RESET button with a pointed object, such as a ballpoint pen.

Note
Pressing the RESET button will erase the clock setting and some stored contents.

Detaching the front panel

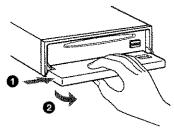
You can detach the front panel of this unit to protect the unit from being stolen.

Caution alarm

If you turn the ignition switch to the OFF position without removing the front panel, the caution alarm will beep for a few seconds.
If you connect an optional amplifier and do not use the built-in amplifier, the beep sound will be deactivated.

1 Press (OFF)*.
CD playback or radio reception stops (the key illumination and display remain on).
* *If your car has no ACC position on the ignition switch, be sure to turn the unit off by pressing (OFF) for 2 seconds to avoid car battery drain.*

2 Press (OPEN), then slide the front panel to the right, and gently pull out the left end of the front panel.



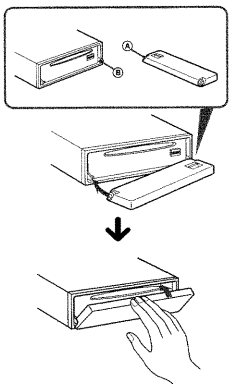
Notes
- *If you detach the panel while the unit is still turned on, the power will turn off automatically to prevent the speakers from being damaged.*
- *Do not drop or put excessive pressure on the front panel and its display window.*
- *Do not subject the front panel to heat/high temperature or moisture. Avoid leaving it in parked cars or on dashboards/rear trays.*

Tip
When carrying the front panel with you, use the supplied front panel case.

continue to next page →

Attaching the front panel

Place hole Ⓐ of the front panel onto the spindle Ⓑ on the unit, then lightly push the left side in. Press SOURCE (or insert a CD) to operate the unit.



Note
Do not put anything on the inner surface of the front panel.

Setting the clock

The clock uses a 24-hour digital indication.

Example: To set the clock to 10:08

1 Press MENU, then press either side of PRESET repeatedly until "CLOCK" appears.

❶ Press ENTER.
The hour indication flashes.

❷ Press either side of PRESET to set the hour.

❸ Press the (+) side of SEEK.
The minute indication flashes.

❹ Press either side of PRESET to set the minute.

2 Press ENTER.

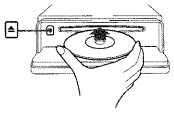
The clock starts. After the clock setting is completed, the display returns to normal play mode.

Tips
- *You can set the clock automatically with the RDS feature (page 16).*
- *When D.INFO mode is set to ON, the time is always displayed (page 18).*

CD Player

Playing a disc

1 Press OPEN and insert the disc (labelled side up).



2 Close the front panel.
Playback starts automatically.

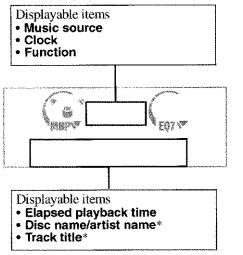
If a disc is already inserted, press SOURCE repeatedly until "CD" appears to start playback.

To	Press
Stop playback	OFF
Eject the disc	OPEN then ⏏
Skip tracks – Automatic Music Sensor	SEEK (I◀◀/▶▶I) [once for each track]
Fast-forward/ reverse – Manual Search	SEEK (◀◀/▶▶) [hold to desired point]

Note
When the last track on the disc is over, playback restarts from the first track of the disc.

Display items

When the disc/track changes, any prerecorded title* of the new disc/track is automatically displayed (if the Auto Scroll function is set to "ON," names exceeding 8 characters will be scrolled (page 18)).



To	Press
Switch display item	DISPLAY/PTY

* *Only for CD TEXT discs with the artist name.*

Notes
- *Some characters cannot be displayed.*
- *For some CD TEXT discs with very many characters, information may not scroll.*
- *This unit cannot display the artist name for each track of a CD TEXT disc.*

Tip
When Auto scroll is set to OFF and the disc/track name is changed, the disc/track name does not scroll.

Playing tracks repeatedly

— Repeat Play

The current track will repeat itself when it reaches the end.

During playback, press 3 (REP) until "REP-ON" appears in the display.
Repeat Play starts.

To return to normal play mode, select "REP-OFF."

Playing tracks in random order

— Shuffle Play

You can select to play the tracks on the current disc in random order.

During playback, press 6 (SHUF) repeatedly until "SHUF-ON" appears in the display.
Shuffle Play starts.

To return to normal play mode, select "SHUF-OFF."

Radio

The unit can store up to 6 stations per band (FM1, FM2, FM3, MW, and LW).

Caution
When tuning in stations while driving, use Best Tuning Memory to prevent accidents.

Storing stations automatically

— Best Tuning Memory (BTM)

The unit selects the stations with the strongest signals within the selected band, and stores them in the order of their frequency.

1 Press SOURCE repeatedly to select the radio.

2 Press MODE repeatedly to select the band.

3 Press MENU, then press either side of PRESET repeatedly until "BTM" appears.

4 Press ENTER.
A beep sounds when the setting is stored.

Notes
- *If only a few stations can be received due to weak signals, some number buttons will retain their former settings.*
- *When a number is indicated in the display, the unit starts storing stations from the one currently displayed.*

Receiving the stored stations

1 Press SOURCE repeatedly to select the radio.

2 Press MODE repeatedly to select the band.

3 Press the number button (1 to 6) on which the desired station is stored.

Tip
Press either side of PRESET to receive the stations in the order they are stored in the memory (Preset Search function).

If preset tuning does not work

Press either side of SEEK to search for the station (automatic tuning).
Scanning stops when the unit receives a station. Repeat until the desired station is received.

Tips
- *If automatic tuning stops too frequently, turn on the Local Seek to limit seek to stations with stronger signals (page 19).*
- *If you know the frequency of the station you want to listen to, press and hold either side of SEEK to locate the approximate frequency, then press SEEK repeatedly to fine adjust to the desired frequency (manual tuning).*

If FM stereo reception is poor

Select monaural reception mode (page 19).
The sound improves, but becomes monaural ("ST" disappears).

Storing only the desired stations

You can manually preset the desired stations on any chosen number button.

1 Press SOURCE repeatedly to select the radio.

2 Press MODE repeatedly to select the band.

3 Press either side of SEEK to tune in the station that you want to store.

4 Press the desired number button (1 to 6) for 2 seconds until "MEM" appears.
The number button indication appears in the display.

Note
If you try to store another station on the same number button, the previously stored station will be erased.

Tuning in a station through a list

— List-up

1 During radio reception, press (LIST) momentarily.
The frequency or the name assigned to the station currently tuned in flashes.

2 Press either side of (PRESET) repeatedly until you find the desired station.
If no name is assigned to the selected station, the frequency appears in the display.

3 Press (ENTER) to tune in the desired station.

RDS

Overview of RDS

FM stations with Radio Data System (RDS) service send inaudible digital information along with the regular radio programme signal. For example, one of the following will be displayed upon receiving a station with RDS capability.

Displayable items
- **Music source**
- **Clock**
- **Function**

Displayable items
- **Station name (frequency)**
- **Programme type**

To	Press
Switch display item	(DISPLAY/PTY)

RDS services

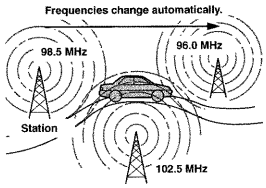
RDS data offers you other conveniences, such as:
- **Automatic retuning** of a programme, helpful during long-distance drives. — AF → page 13
- Receiving **traffic announcements**, even when enjoying another programme/source. — TA → page 14
- Selecting stations by the **type of programme** it broadcasts. — PTY → page 15
- Automatic **clock time** setting. — CT → page 16

Notes
- *Depending on the country or region, not all of the RDS functions are available.*
- *RDS may not work properly if the signal strength is weak or if the station you are tuned to is not transmitting RDS data.*

Automatic retuning for best reception results

— AF function

The alternative frequencies (AF) function allows the radio to always tune into the area's strongest signal for the station you are listening to.



1 Select an FM station (page 11).

2 Press (AF) repeatedly until "AF-ON" appears.
The unit starts searching for an alternative frequency with a stronger signal in the same network.
If "NO AF" flashes, the currently tuned into station does not have an alternative frequency.

Note
When there is no alternative frequency in the area or when you do not need to search for one, turn the AF function off by selecting "AF-OFF."

For stations without alternative frequencies

Press either side of (SEEK) while the station name is flashing (within 8 seconds).
The unit starts searching for another frequency with the same PI (Programme Identification) data ("PI SEEK" appears).
If the unit cannot find the same PI, the unit returns to the previously selected frequency.

Staying with one regional programme

When AF function is on: this unit's factory-set setting restricts reception to a specific region, so you won't be switched to another regional station with a stronger frequency.
If you leave this regional programme's reception area or would like to take advantage of the whole AF function, select "REG-OFF" from the MENU (page 19).

Note
This function does not work in the United Kingdom and in some other areas.

Local Link function (United Kingdom only)

This function enables you to select other local stations in the area, even if they are not stored on your number buttons.

1 Press a number button ((1) to (6)) that has a local station stored on it.

2 Within 5 seconds, press the number button of the local station again.

3 Repeat this procedure until the desired local station is received.

Receiving traffic announcements

— TA/TP

By activating the Traffic Announcement (TA) and Traffic Programme (TP), you can automatically tune in an FM station broadcasting traffic announcements. These settings function regardless of the current FM programme/source, CD; the unit switches back to the original source when the bulletin is over.

Press (TA) repeatedly until "TA-ON" appears.
The unit starts searching for traffic information stations.
"TP" indicates reception of such stations, and "TA" flashes during an actual traffic announcement. The unit will continue searching for stations available with TP if "NO TP" is indicated.

To cancel all traffic announcements, select "TA-OFF."

To	Press
Cancel current announcement	(TA)

Tip
You can also cancel the current announcement by pressing (SOURCE) or (MODE).

Presetting the volume of traffic announcements

You can preset the volume level of the traffic announcements so you won't miss hearing them.

1 Turn the volume control dial to adjust the desired volume level.

2 Press (TA) for 2 seconds.
"TA" appears and the setting is stored.

Receiving emergency announcements

If either AF or TA is on, the unit will switch to emergency announcements, if one comes in while listening to an FM station or CD.

Presetting RDS stations with AF and TA setting

When you preset RDS stations, the unit stores each station's AF/TA setting (on/off) as well as its frequency. You can select a different setting (for AF, TA, or both) for individual preset stations, or the same setting for all preset stations. If you preset stations with "AF-ON" the unit automatically stores stations with the strongest radio signal.

Presetting the same setting for all preset stations

1 Select an FM band (page 10).

2 Press (AF) and/or (TA) to select "AF-ON" and/or "TA-ON."
Note that selecting "AF-OFF" or "TA-OFF" stores not only RDS stations, but also non-RDS stations.

3 Press (MENU), then press either side of (PRESET) repeatedly until "BTM" appears.

4 Press (ENTER) until "BTM" flashes.

Presetting different settings for each preset station

1 Select an FM band, and tune in the desired station (page 11).

2 Press (AF) and/or (TA) to select "AF-ON" and/or "TA-ON."

3 Press the desired number button ((1) to (6)) until "MEM" appears.
Repeat from step 1 to preset other stations.

Tuning in stations by programme type

— PTY

You can tune in a station by selecting the type of programme you would like to listen to.

Programme types	Display
News	NEWS
Current Affairs	AFFAIRS
Information	INFO
Sports	SPORT
Education	EDUCATE
Drama	DRAMA
Culture	CULTURE
Science	SCIENCE
Varied	VARIED
Popular Music	POP M
Rock Music	ROCK M
Easy Listening	EASY M
Light Classical	LIGHT M
Classical	CLASSICS
Other Music Type	OTHER M
Weather	WEATHER
Finance	FINANCE
Children's Programmes	CHILDREN
Social Affairs	SOCIAL A
Religion	RELIGION
Phone In	PHONE IN
Travel	TRAVEL
Leisure	LEISURE
Jazz Music	JAZZ
Country Music	COUNTRY
National Music	NATION M
Oldies Music	OLDIES
Folk Music	FOLK M
Documentary	DOCUMENT

Note
You cannot use this function in some countries where no PTY (Programme Type selection) data is available.

1 Press (DISPLAY/PTY) during FM reception until "PTY" appears.

The current programme type name appears if the station is transmitting the PTY data.
"--------" appears if the received station is not an RDS station, or if the RDS data is not received.

2 Press (PRESET) repeatedly until the desired programme type appears.
The programme types appear in the order shown in the table.
"--------" appears if the programme type is not specified in the RDS data.

3 Press (ENTER).
The unit starts searching for a station broadcasting the selected programme type.

Setting the clock automatically

— CT

The CT (Clock Time) data from the RDS transmission sets the clock automatically.

1 During radio reception, press (MENU), then press either side of (PRESET) repeatedly until "CT-OFF" appears.

2 Press the (+) side of (SEEK) repeatedly until "CT-ON" appears.
The clock is set.

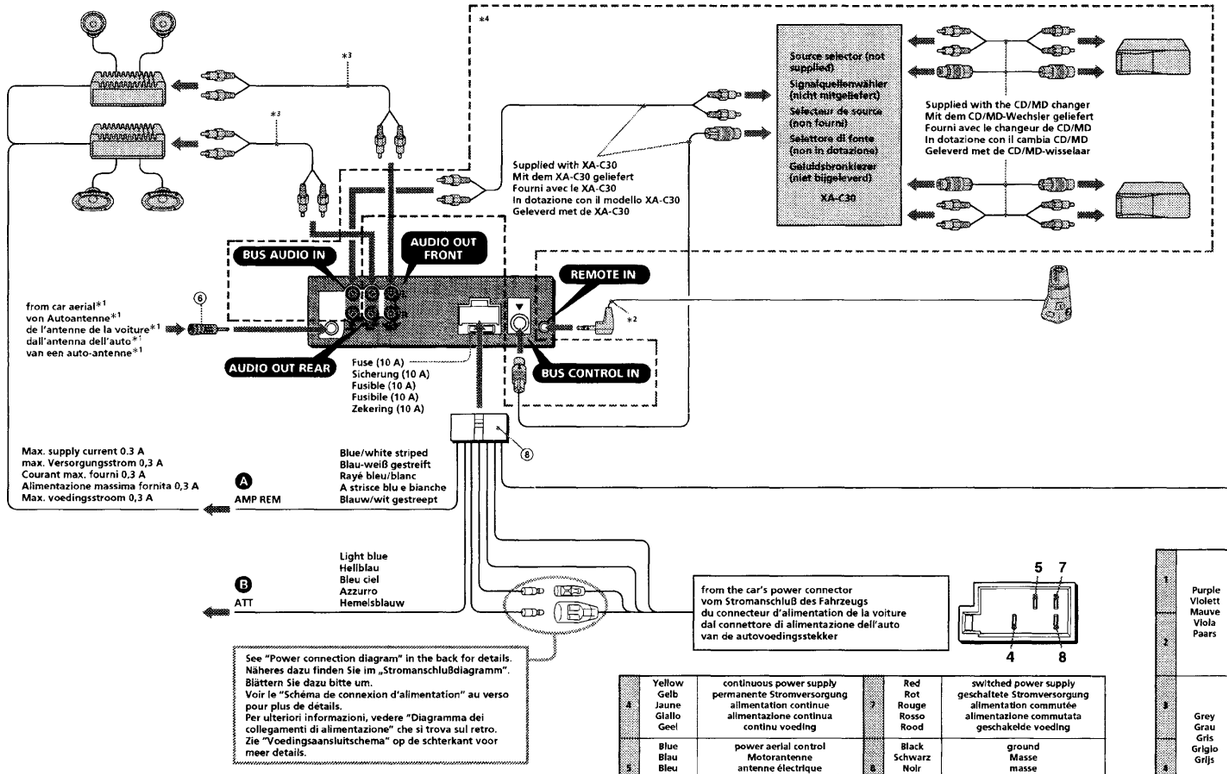
3 Press (ENTER) to return to the normal display.

To cancel the CT function, select "CT-OFF" in step 2.

Notes

- *The CT function may not work even though an RDS station is being received.*
- *There might be a difference between the time set by the CT function and the actual time.*

3



4	Yellow Gelb Jaune Giallo Geel	continuous power supply permanente Stromversorgung alimentation continue alimentazione continua continu voeding	7	Red Rot Rouge Rosso Rood	switched power supply geschaltete Stromversorgung alimentation commutée alimentazione commutata geschakelde voeding
5	Blue Blau Bleu Blu Blauw	power aerial control Motorantenne antenne électrique comando dell'antenna elettrica automatische antenne	8	Black Schwarz Noir Nero Zwart	ground Masse masse terra aarding

Positions 1, 2, 3 and 6 do not have pins.
An Position 1, 2, 3 und 6 befinden sich keine Stifte.
Les positions 1, 2, 3 et 6 ne comportent pas de broches.
Le posizioni 1, 2, 3 e 6 non hanno piedini.
De posities 1, 2, 3 en 6 hebben geen pins.

1	Purple Violett Mauve Viola Paars	+	Speaker, Rear, Right Lautsprecher hinten rechts haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts	5	White Weiß Blanc Bianco Wit	+	Speaker, Front, Left Lautsprecher vorne links haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
2		–	Speaker, Rear, Right Lautsprecher hinten rechts haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts	6		–	Speaker, Front, Left Lautsprecher vorne links haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
3	Grey Grau Gris Grigio Grijs	+	Speaker, Front, Right Lautsprecher vorne rechts haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts	7	Green Grün Vert Verde Groen	+	Speaker, Rear, Left Lautsprecher hinten links haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links
4		–	Speaker, Front, Right Lautsprecher vorne rechts haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts	8		–	Speaker, Rear, Left Lautsprecher hinten links haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links

Negative polarity positions 2, 4, 6, and 8 have striped cords.
An den negativ gepolten Positionen 2, 4, 6 und 8 befinden sich gestreifte Adern.
Les positions de polarité négative 2, 4, 6 et 8 sont dotées de cordons rayés.
Le posizioni a polarità negativa 2, 4, 6 e 8 hanno cavi rigati.
De negatieve posities 2, 4, 6 en 8 hebben gestreepte kabels.

1 **Note for the aerial connecting*
If your car aerial is an ISO (International Organisation for Standardisation) type, use the supplied adaptor Ⓚ to connect it. First connect the car aerial to the supplied adaptor, then connect it to the aerial jack of the master unit.
2 **Insert with the cord upwards*
3 **RCA pin cord (not supplied)*
4 **CDX-CA650X/CA650V/CA650 only*

1 **Hinweis zum Anschließen der Antenne*
Wenn Ihre Fahrzeugantenne der ISO-Norm (ISO = International Organization for Standardization - Internationale Normungsgemeinschaft) entspricht, schließen Sie sie mit Hilfe des mitgelieferten Adapters Ⓚ an. Verbinden Sie zuerst die Fahrzeugantenne mit dem mitgelieferten Adapter, und verbinden Sie diesen dann mit der Antennenbuchse des Hauptgeräts.
2 **Mit dem Kabel nach oben einsetzen*
3 **Cinchkabel (nicht mitgeliefert)*
4 **Nur CDX-CA650X/CA650V/CA650*

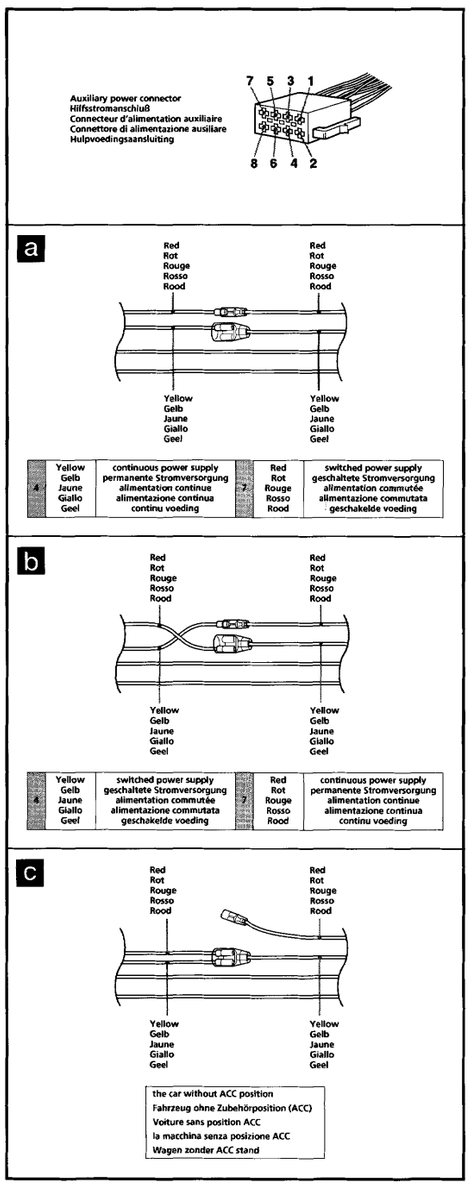
1 **Remarque sur le raccordement de l'antenne*
Si votre antenne de voiture est de type ISO (organisation internationale de normalisation), utilisez l'adaptateur fourni Ⓚ pour la raccorder. Raccordez d'abord l'antenne de voiture à l'adaptateur fourni et, ensuite, à la prise d'antenne de l'appareil principal.
2 **Insérez avec le câble vers le haut*
3 **Cordon à broche RCA (non fourni)*
4 **CDX-CA650X/CA650V/CA650 seulement*

1 **Nota per il collegamento dell'antenna*
Se la vostra antenna della macchina è di tipo ISO (International Organization Standardization), utilizzare l'adattatore Ⓚ in dotazione per collegarla. Collegare prima l'antenna della macchina all'adattatore in dotazione, quindi collegarla alla presa dell'antenna dell'apparecchio principale.
2 **Inserire con il cavo rivolto verso l'alto*
3 **Cavo a piedini RCA (non in dotazione)*
4 **Solo CDX-CA650X/CA650V/CA650*

1 **Opmerking bij de antenne-aansluiting*
Indien uw wagen is uitgerust met een antenne van het type ISO (International Organisation for Standardization), moet u die aansluiten met behulp van de meegeleverde adaptor Ⓚ. Sluit eerst de auto-antenne aan op de meegeleverde adaptor en vervolgens de antennestekker op het hoofdtoestel.
2 **Inbrengen met het snoer naar boven*
3 **Tulpstekkersnoer (niet bijgeleverd)*
4 **Alleen voor de CDX-CA650X/CA650V/CA650*

Power connection diagram

Auxiliary power connector may vary depending on the car. Check your car's auxiliary power connector diagram to make sure the connections match correctly. There are three basic types (illustrated below). You may need to switch the positions of the red and yellow leads in the car stereo's power connecting cord.
After matching the connections and switched power supply leads correctly, connect the unit to the car's power supply. If you have any questions and problems connecting your unit that are not covered in this manual, please consult the car dealer.



Cautions

- This unit is designed for negative ground 12 V DC operation only.
- Do not get the wires under a screw, or caught in moving parts (e.g. seat railing).
- Before making connections, turn the car ignition off to avoid short circuits.
- Connect the power connecting cord Ⓑ to the unit and speakers before connecting it to the auxiliary power connector.
- **Run all ground wires to a common ground point.**
- Be sure to insulate any loose unconnected wires with electrical tape for safety.

Notes on the power supply cord (yellow)

- When connecting this unit in combination with other stereo components, the connected car circuit's rating must be higher than the sum of each component's fuse.
- When no car circuits are rated high enough, connect the unit directly to the battery.

Connection diagram (3)

Ⓐ **To AMP REMOTE IN of an optional power amplifier**
This connection is only for amplifiers. Connecting any other system may damage the unit.

Ⓑ **To the interface cable of a car telephone**

Warning
If you have a power aerial without a relay box, connecting this unit with the supplied power connecting cord Ⓑ may damage the aerial.

Notes on the control leads

- *The power aerial control lead (blue) supplies +12 V DC when you turn on the tuner or when you activate the AF (Alternative Frequency), TA (Traffic Announcement) function.*
- *When your car has built-in FM/MW/LW aerial in the rear/side glass, connect the power aerial control lead (blue) or the accessory power input lead (red) to the power terminal of the existing aerial booster. For details, consult your dealer.*
- *A power aerial without a relay box cannot be used with this unit.*

Memory hold connection
When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection

- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the ground lead of this unit to the negative (-) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*

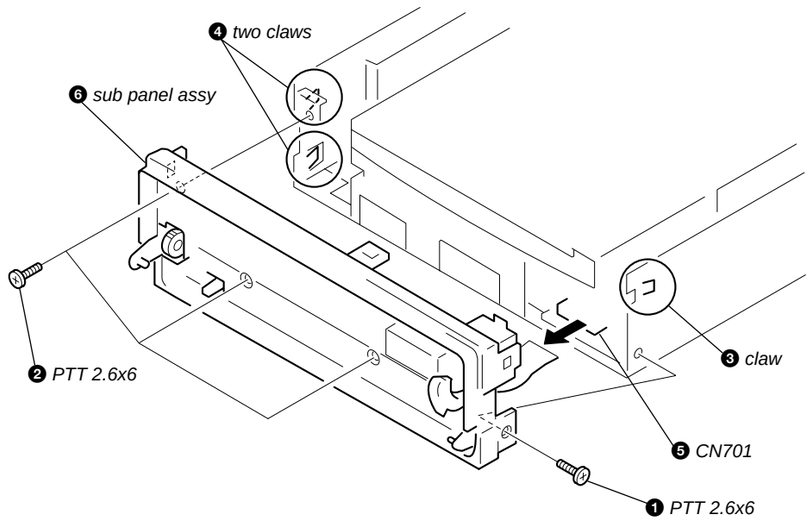
SECTION 2
DISASSEMBLY

• The equipment can be removed using the following procedure.

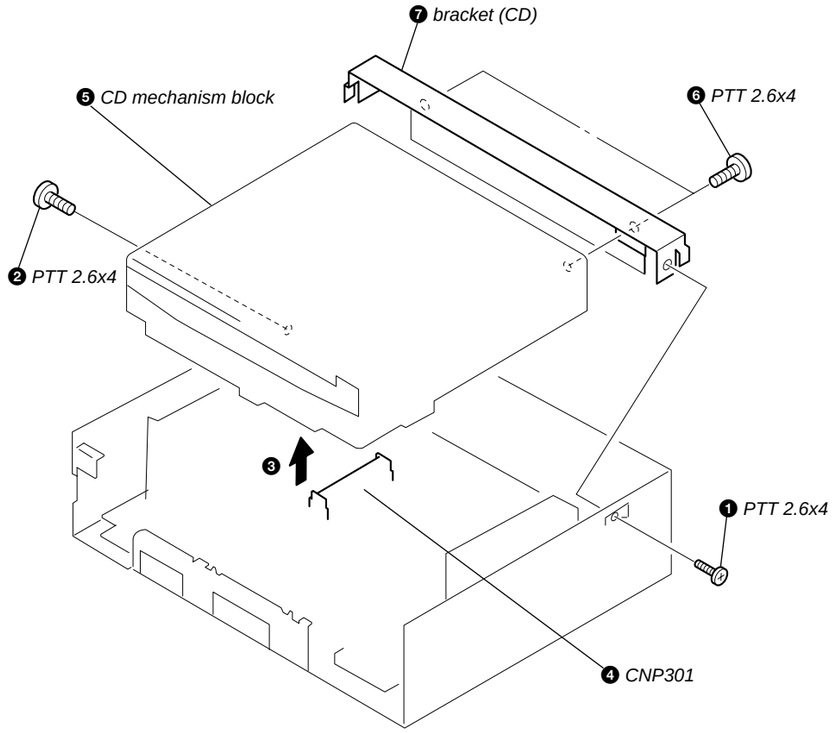
Set → Sub Panel Assy → CD Mechanism Block → Main Board → Heat Sink
Chassis (T.U) Assy → Disc In Board, Guide (Disc) → Arm Roller Assy
Servo Board
Chassis (OP) Assy → Optical Pick-up Block

Note : Follow the disassembly procedure in the numerical order given.

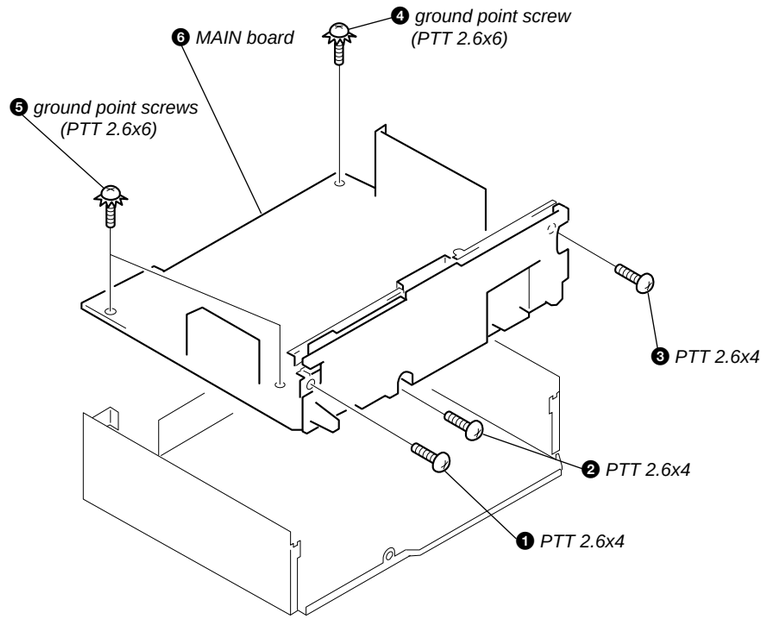
2-1. SUB PANEL ASSY



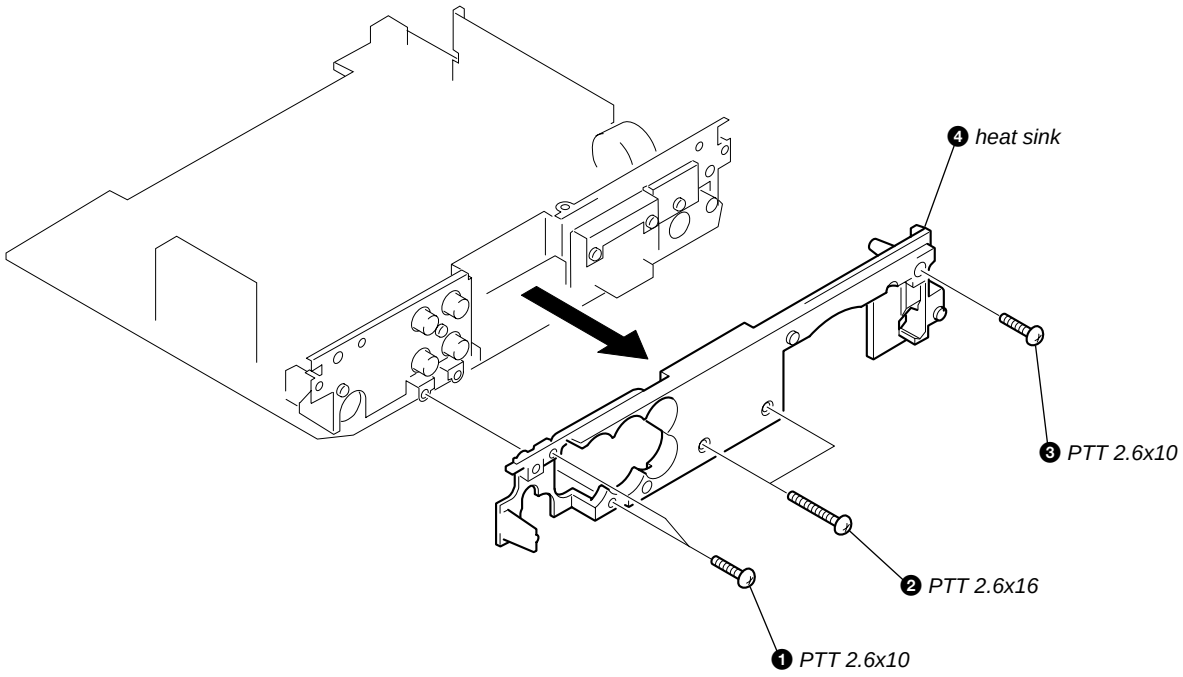
2-2. CD MECHANISM BLOCK



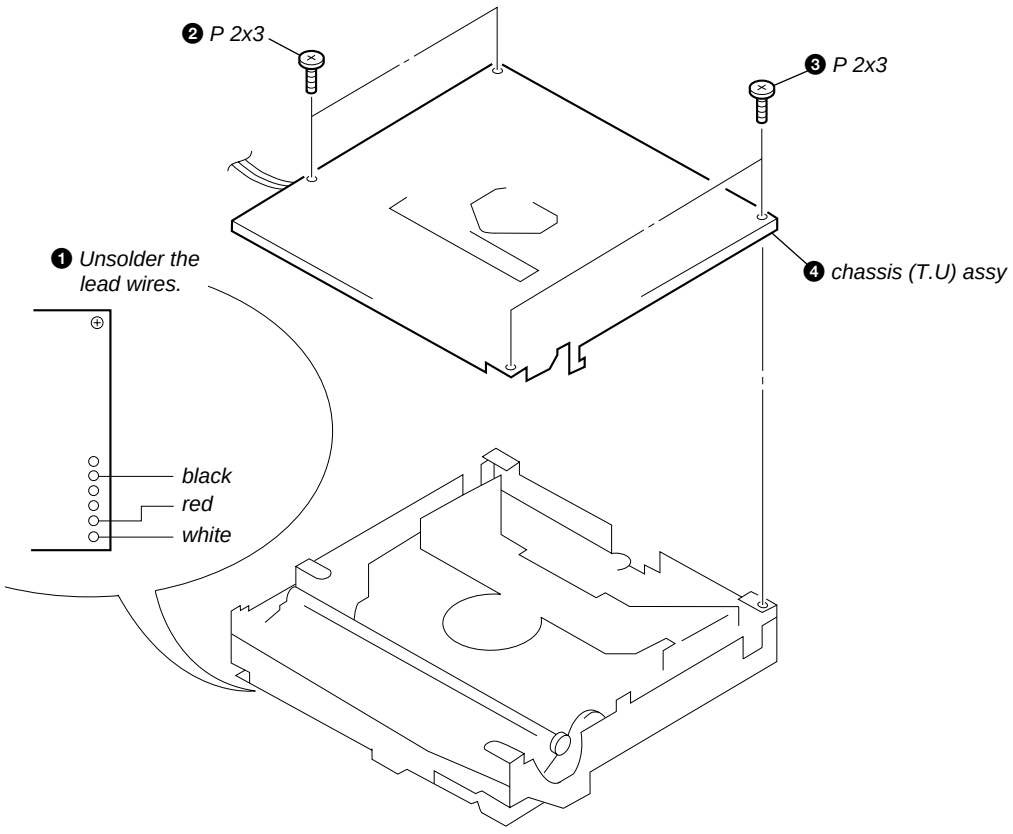
2-3. MAIN BOARD



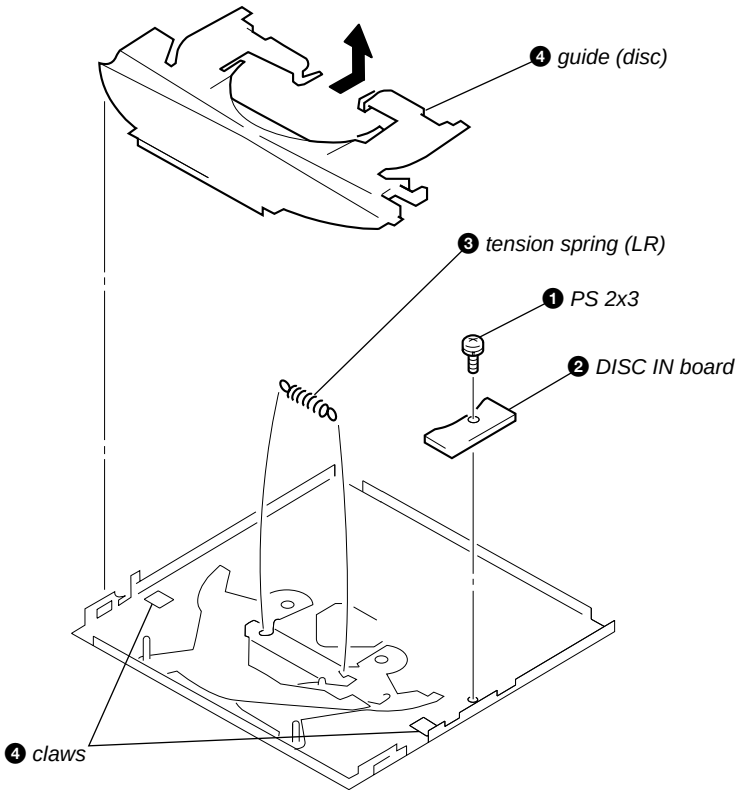
2-4. HEAT SINK



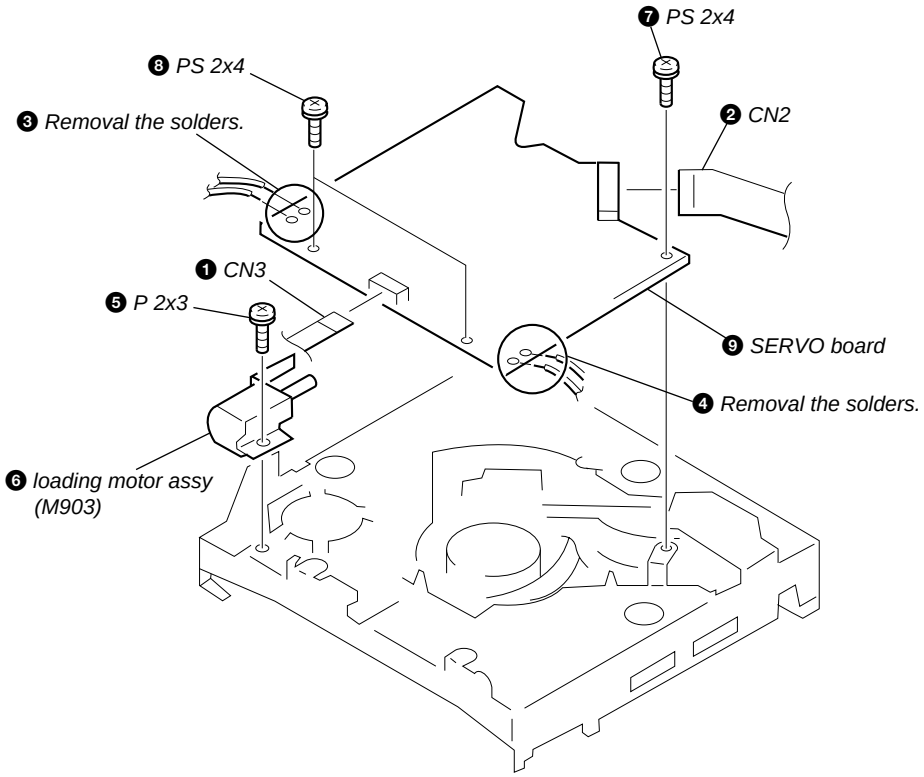
2-5. CHASSIS (T.U) ASSY



2-6. DISC IN BOARD, GUIDE (DISC)



2-7. SERVO BOARD



2-8. ARM ROLLER ASSY

• When installing, take note of the positions arm (roller) and washers. (Fig. 1)

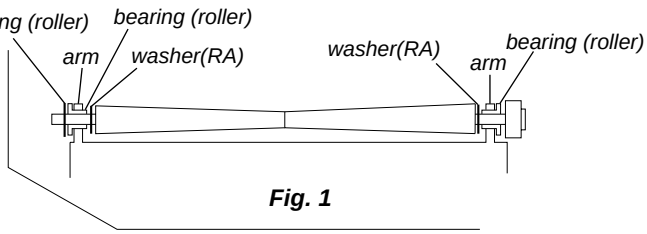
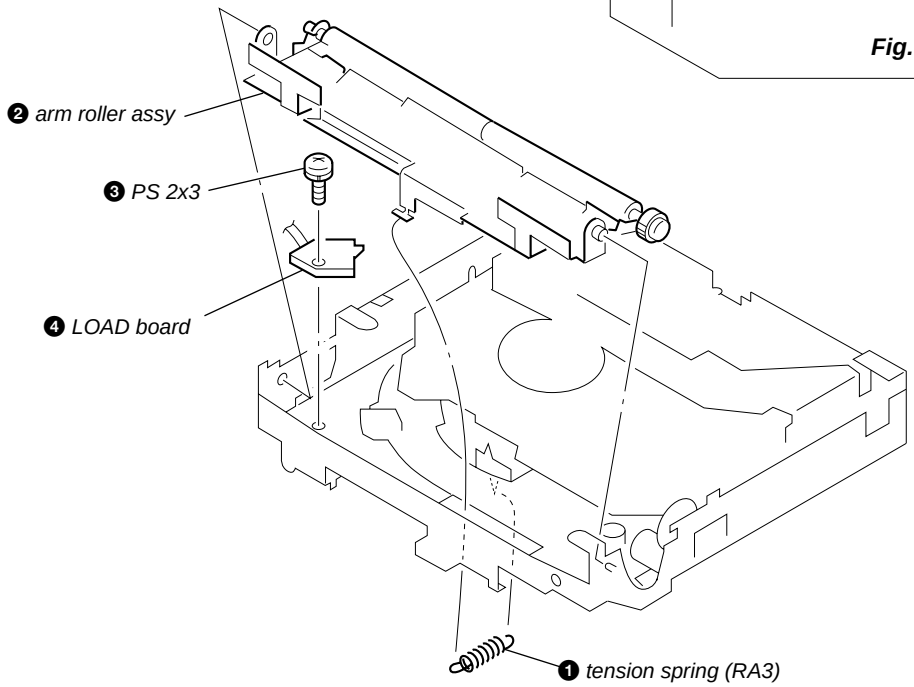
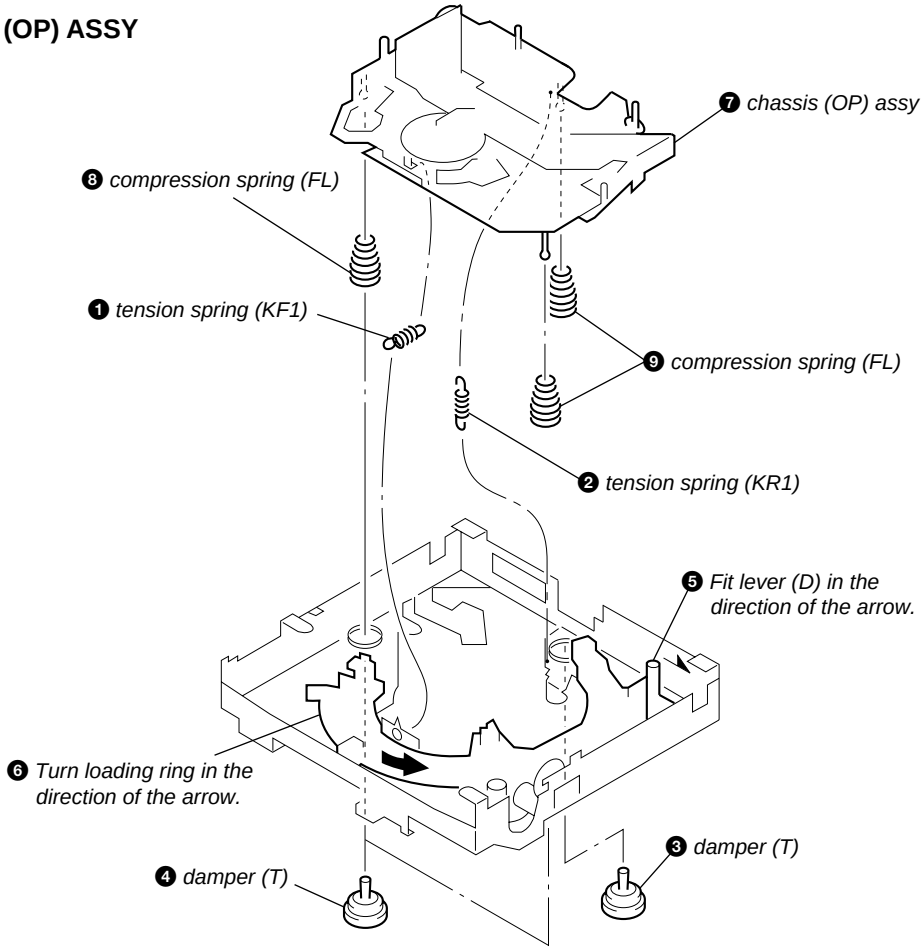


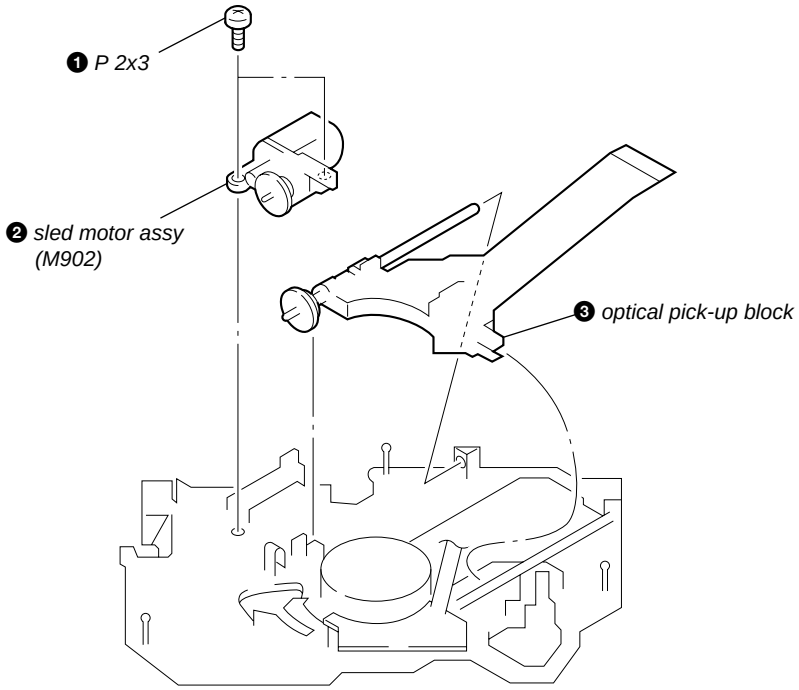
Fig. 1



2-9. CHASSIS (OP) ASSY


❼ chassis (OP) assy
❽ compression spring (FL)
❶ tension spring (KF1)
❾ compression spring (FL)
❷ tension spring (KR1)
❺ Fit lever (D) in the direction of the arrow.
❻ Turn loading ring in the direction of the arrow.
❸ damper (T)
❹ damper (T)

2-10. OPTICAL PICK-UP BLOCK



SECTION 3
DIAGRAMS

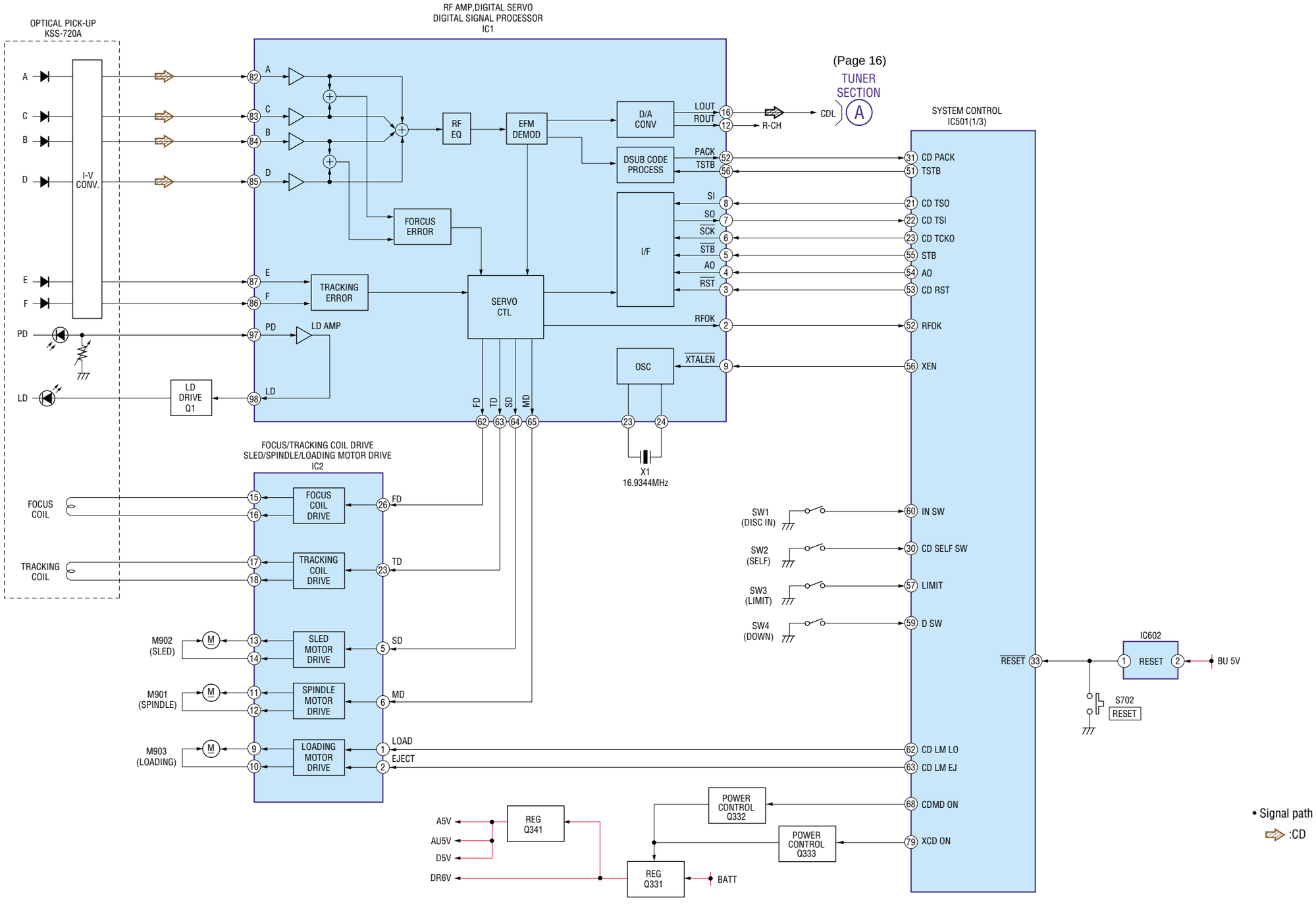
3-1. IC PIN DESCRIPTION

• IC501 MN101C49KTH (SYSTEM CONTROL)

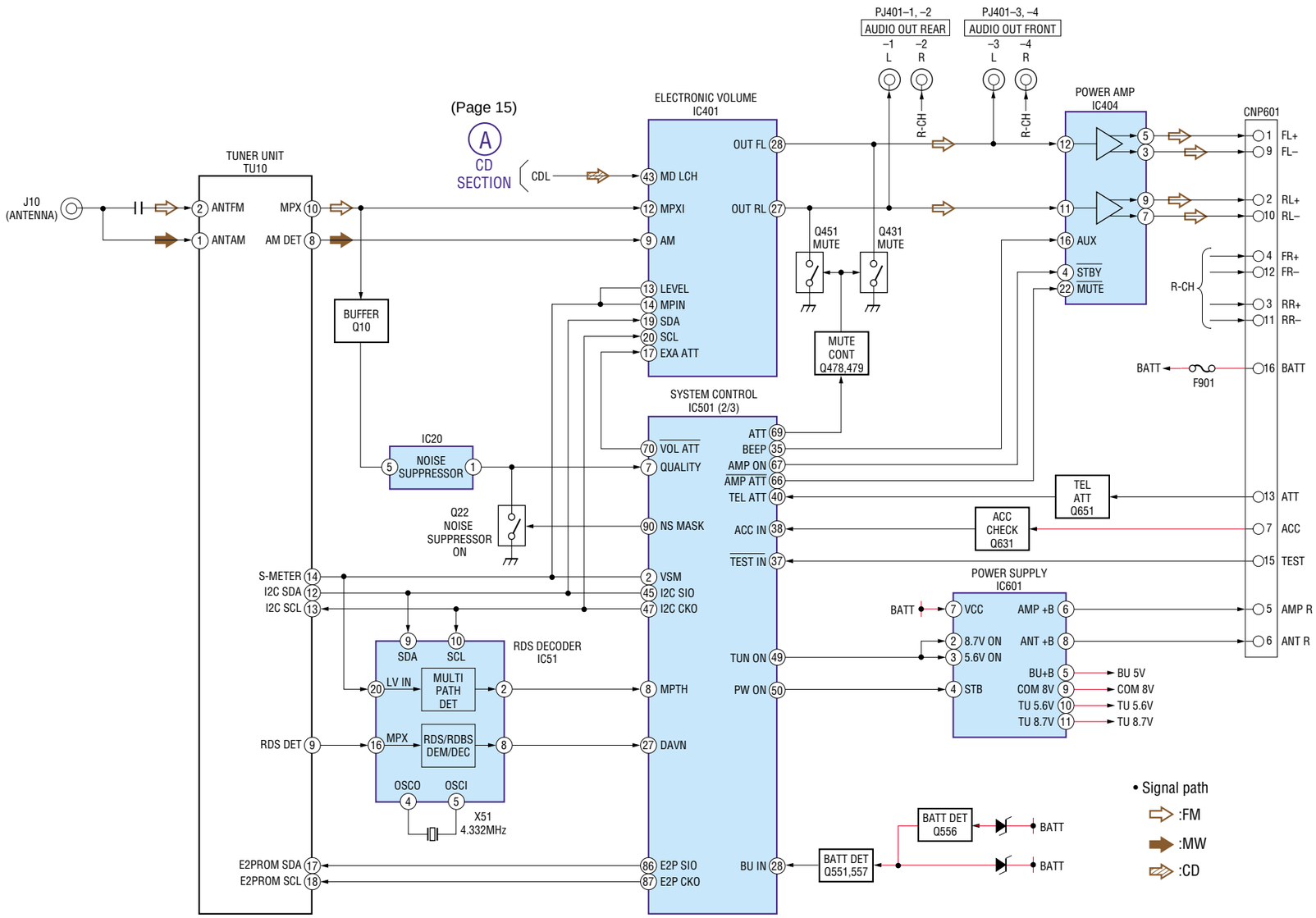
Pin No.	Pin Name	I/O	Pin Description
1	VREF–	—	A/D converter power supply (–) pin
2	VSM	I	S-meter voltage detection input
3	NIL (FMAGC)	I	Not used. (Connect to VSS in this set)
4, 5	KEYIN1, 0	I	Key input 1, 0
6	RCIN0	I	Rotary commander key input
7	QUALITY	I	Noise detection input
8	MPTH	I	Multipath detection input
9	NIL (DSTSEL)	I	Not used. (Fixed at L in this set)
10	VREF+	—	A/D converter power supply (+) pin (+5 V)
11	VDD	—	Power supply pin (+5 V)
12	OSCOUT	O	Main clock output (18.43 MHz)
13	OSCIN	I	Main clock input (18.43 MHz)
14	VSS	—	Ground
15	XIN	I	Sub clock input (32.768 kHz)
16	XOUT	O	Sub clock output (32.768 kHz)
17	MMOD	I	Memory mode select input (Fixed at L in this set)
18	LCDSO	O	Serial data output for LCD driver IC.
19	LCDCE	O	Chip enable output for LCD driver IC.
20	LCDCKO	O	Serial clock output for LCD driver IC.
21	CD TSO	O	Serial data output for CD servo IC.
22	CD TSI	I	Serial data input from CD servo IC.
23	CD TCKO	O	Serial clock output for CD servo IC.
24	$\overline{\text{SYSRST}}$	O	System reset output (Not used in this set)
25	$\overline{\text{BUSON}}$	O	BUS ON output (Not used in this set)
26	KEYACK	I	Key acknowledge detection input
27	DAVN	I	RDS data block synchronization detection input
28	BUIN	I	Backup power supply input
29	SIRCS	I	SIRCS input
30	CD SELFSW	I	CD mechanism deck Self switch detection input
31	CD PACK	I	CD text pack synchronization signal input from CD servo IC.
32	VDD2	—	Power supply pin (+5 V)
33	$\overline{\text{RESET}}$	I	Microcomputer reset input
34	$\overline{\text{NOSESW}}$	I	Front panel attachment detection input
35	BEEP	O	Beep output
36	NCO	O	Not used. (Open)
37	$\overline{\text{TESTIN}}$	I	Test mode detection input
38	$\overline{\text{ACCIN}}$	I	Accessory power supply detection input
39	NCO (VCC)	O	Not used. (Open)
40	TELATT	I	Telephone attenuator detection input
41	NCO (VCC)	I	Not used. (Fixed at H in this set)
42	UNISO	O	SONY-BUS data output (Not used in this set)
43	UNISI	I	SONY-BUS data input (Not used in this set)
44	UNICKO	O	SONY-BUS clock output (Not used in this set)
45	12C SIO	I/O	I2C BUS serial data input/output
46	NCO	O	Not used. (Open)
47	12C CKO	O	I2C BUS serial clock output
48	NCO	O	Not used. (Open)
49	TUNON	O	Tuner power supply control output
50	PW ON	O	System power supply control output
51	TSTB	O	CD text parameter strobe output for CD servo IC.
52	RFOK	I	RFOK signal input from CD servo IC.

Pin No.	Pin Name	I/O	Pin Description
53	CD RST	O	Reset signal output for CD servo IC.
54	A0	O	Command/parameter discrimination signal output for CD servo IC.
55	STB	O	Data strobe signal output for CD servo IC.
56	X EN	O	Crystal oscillation control output for CD servo IC.
57	LIMIT	I	CD mechanism deck Limit switch detection input
58	PH1	I	CD mechanism deck PH1 detection input (Not used in this set)
59	D SW	I	CD mechanism deck Down switch detection input
60	INSW	I	CD mechanism deck Disc in switch detection input
61	NC (PH3)	O	CD mechanism deck PH3 detection input (Not used in this set)
62	CD LM LO	O	CD mechanism deck loading motor control output (Loading direction)
63	CD LM EJ	O	CD mechanism deck loading motor control output (Eject direction)
64, 65	NCO	O	Not used. (Open)
66	$\overline{\text{AMPATT}}$	O	Power amplifier attenuator control output
67	AMPON	O	Power amplifier standby control output
68	CDMD ON	O	CD mechanism deck power supply control output
69	ATT	O	System attenuator control output
70	$\overline{\text{VOLATT}}$	O	Electric volume attenuator control output
71 – 75	NCO	O	Not used. (Open)
76	COLSW	I	Key illumination 1 color/2 color select initial setting input (L: 1 COLOR, H: 2 COLOR) (Fixed at L: CDX-L550, H: CDX-L550V/L550X)
77	COLSEL	I	1 color initial setting input (L: amber, H: green) (Fixed at L in this set)
78	DIMSEL	I	Manual dimmer initial setting input (L: dimmer without, H: dimmer with) (Fixed at L: CDX-L550/L550X, H: CDX-L550V)
79	XCD ON	O	CD signal processing crystal drive output
80	NCO	O	Not used. (Fixed at L in this set)
81 – 85	NCO	O	Not used. (Open)
86	E2P SIO	I/O	EEPROM serial data input/output
87	E2P CKO	O	EEPROM serial clock output
88	NCO	O	Not used. (Open)
89	FLASH W	I	Flash microcomputer write detection input
90	NS MASK	O	Noise mask output
91	$\overline{\text{AD ON}}$	O	Key power supply control output
92	DOORIND	O	Sub panel power control output
93	ILLON	O	Illumination power control output
94	$\overline{\text{DOORSW}}$	I	Front panel OPEN/CLOSE detection input
95	DAVSS	—	D/A converter power supply (–) pin
96, 97	REIN1, 0	I	Rotary encoder input 1, 0
98	RCIN1	I	Rotary commander SHIFT key input
99	RAMBU	I	Not used. (Fixed at L in this set)
100	DAVDD	—	D/A converter power supply (+) pin (+5 V)

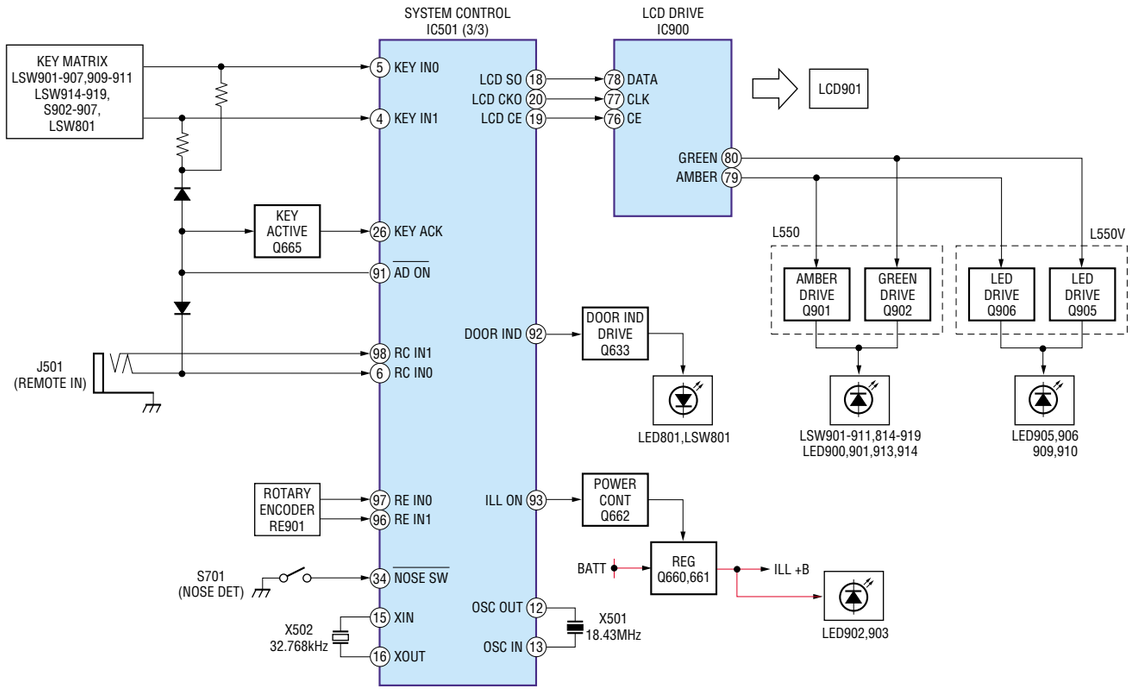
3-2. BLOCK DIAGRAM — CD SECTION —



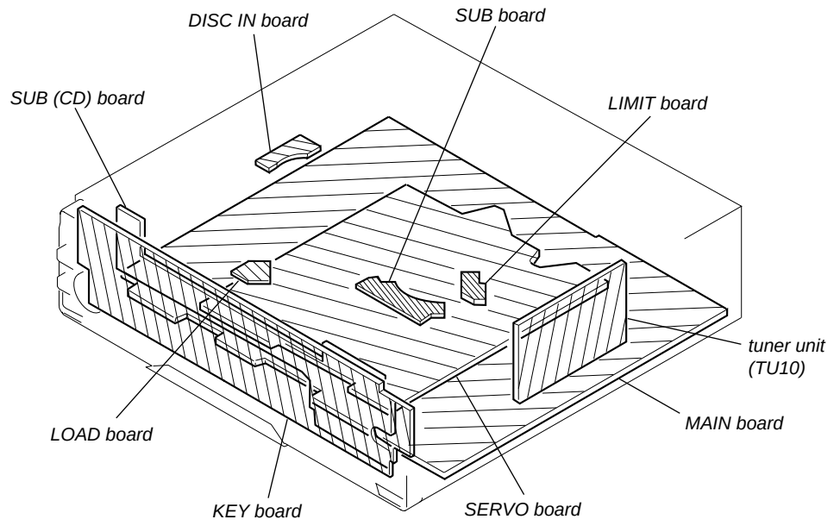
3-3. BLOCK DIAGRAM — TUNER SECTION —



3-4. BLOCK DIAGRAM — DISPLAY SECTION —



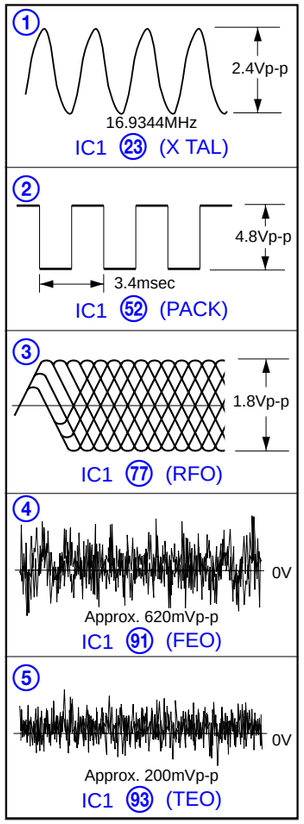
3-5. CIRCUIT BOARDS LOCATION



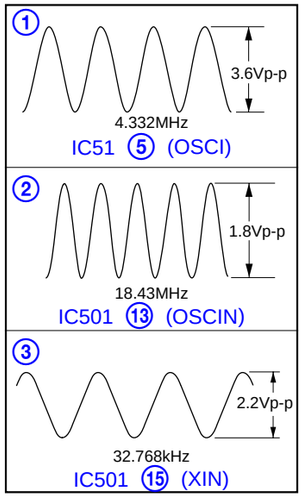
• Waveforms

— Servo Board —

(MODE: CD PLAY)



— Main Board —



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

for schematic diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- % : indicates tolerance.
- △ : internal component.
- ▭ : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- ▬ : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - ⇨ : FM
  - ➡ : MW
  - ⇨ : CD

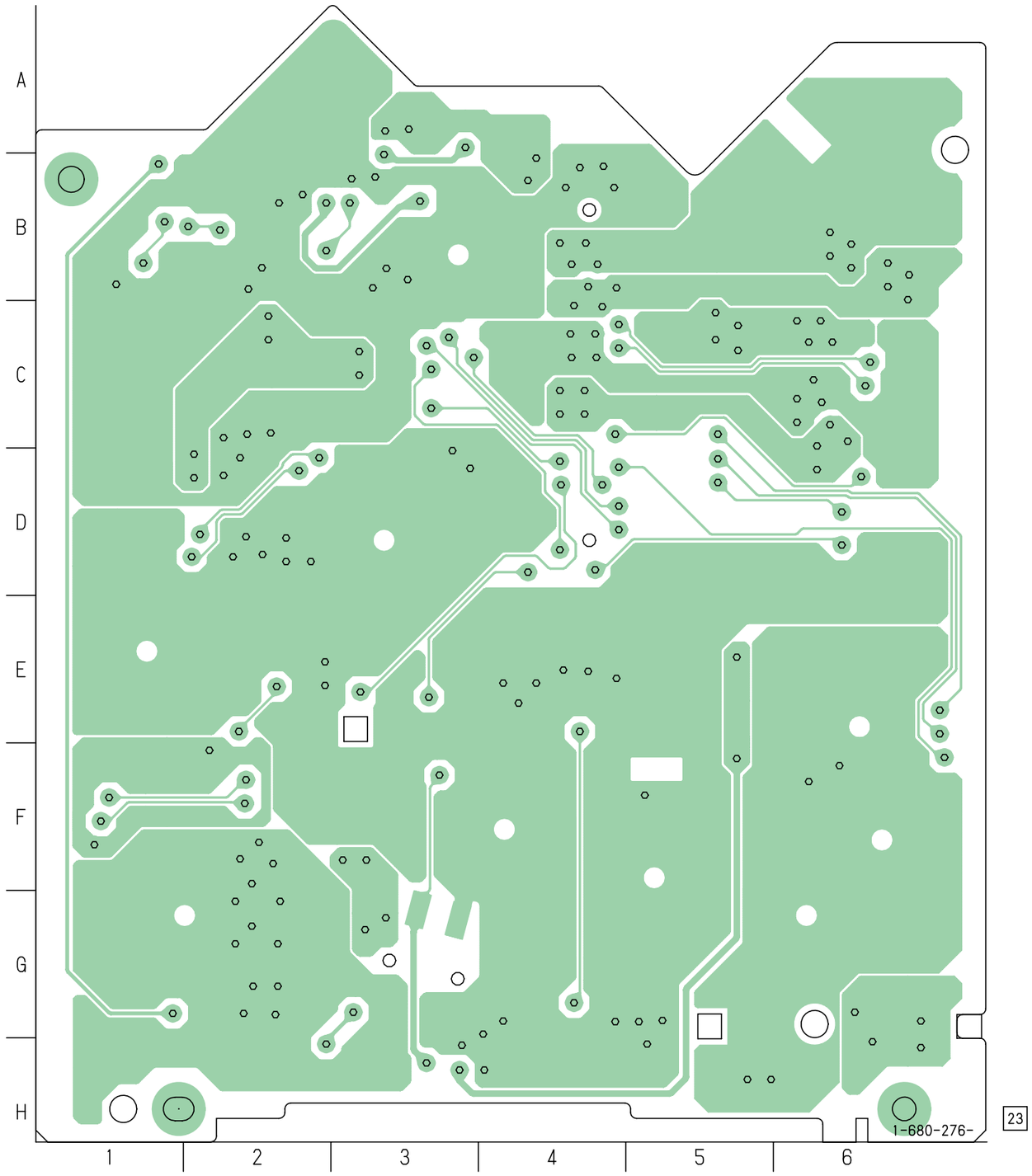
for printed wiring boards:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ○ : Through hole.
- ▬ : Pattern from the side which enables seeing. (The other layer's patterns are not indicated.)

Caution:
Pattern face side: (Side B) Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A) Parts on the parts face side seen from the parts face are indicated.

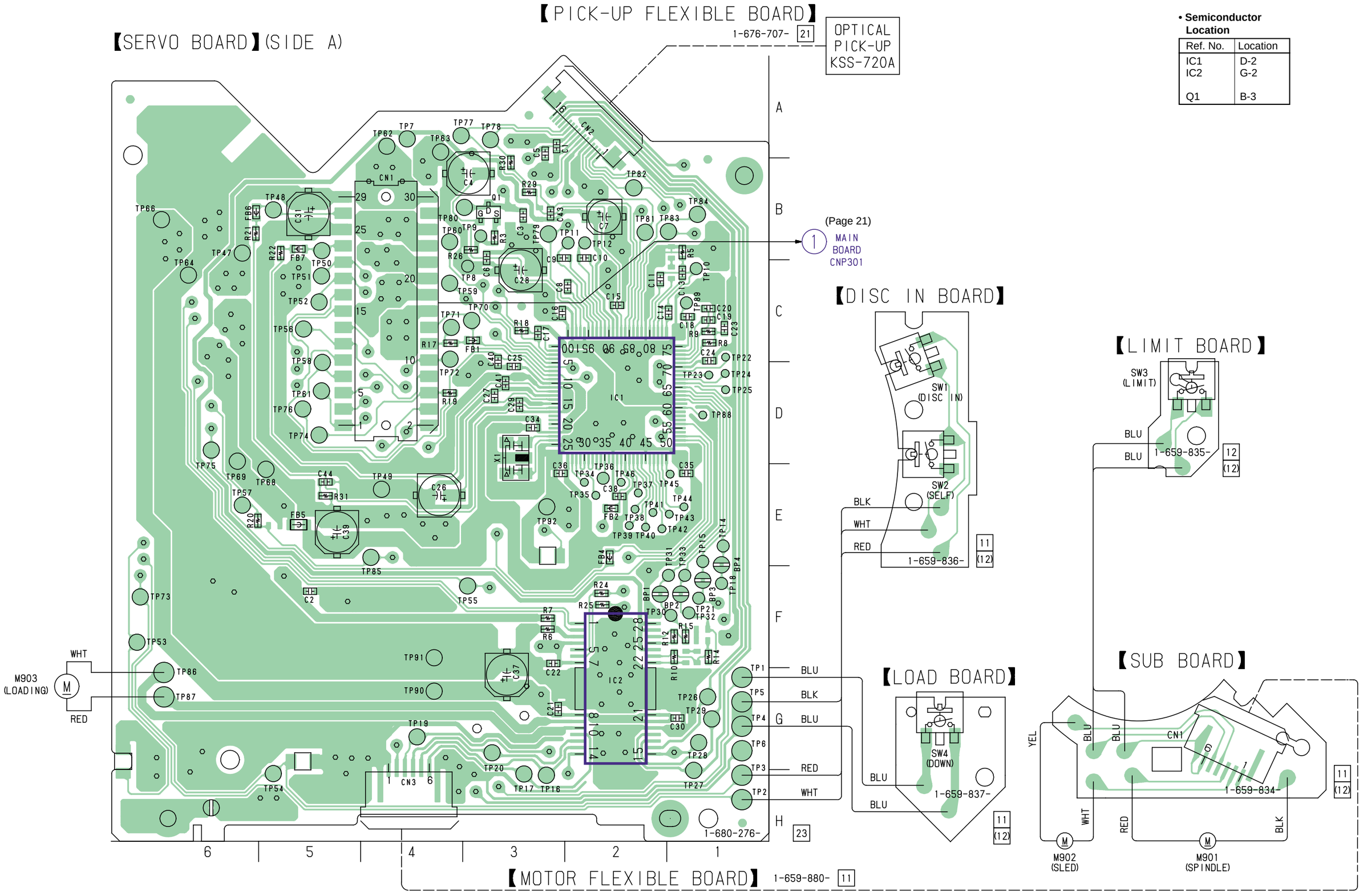
3-6. PRINTED WIRING BOARDS — CD MECHANISM SECTION —

【SERVO BOARD】(SIDE B)



• **Semiconductor Location**

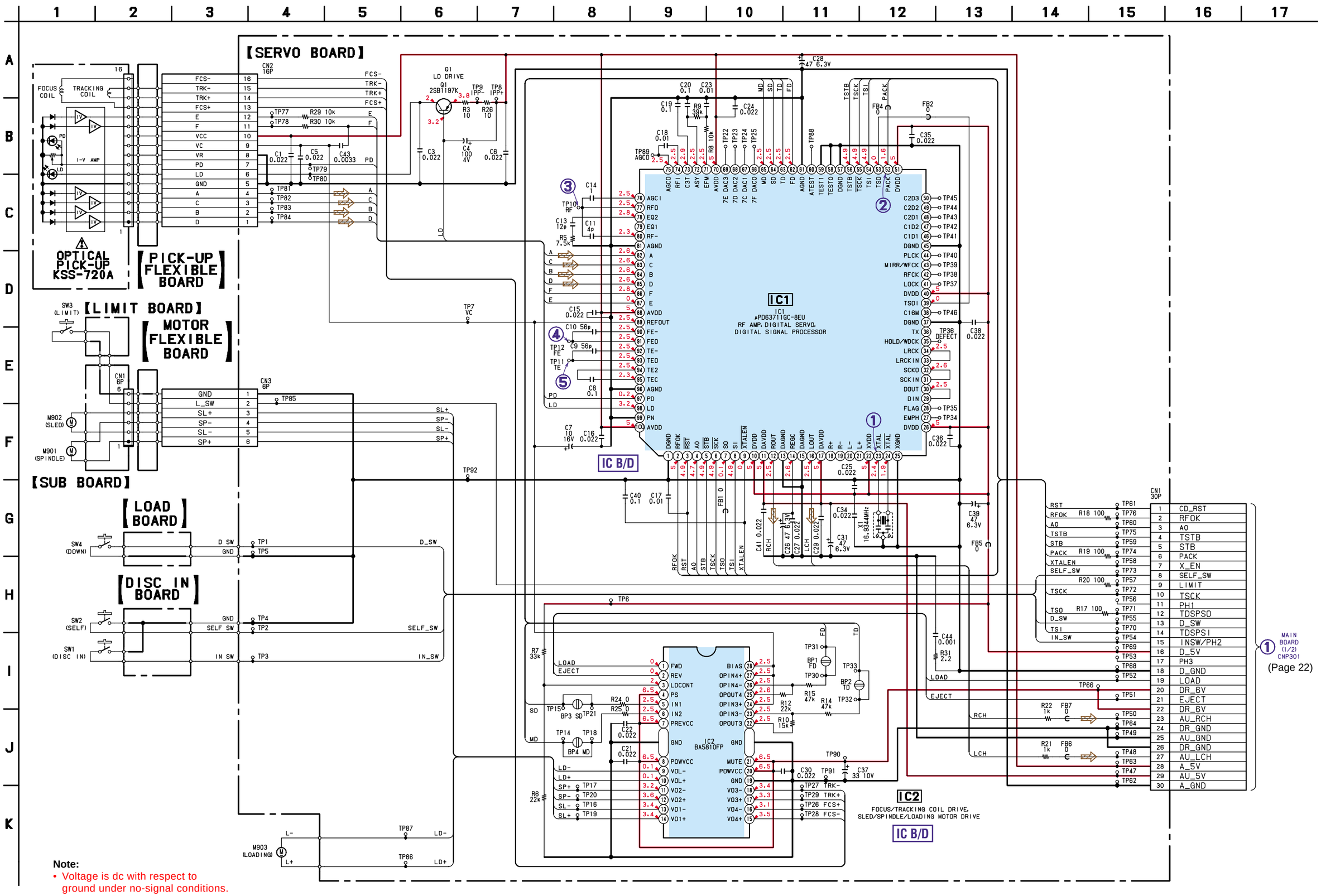
Ref. No.	Location
IC1	D-2
IC2	G-2
Q1	B-3



• Refer to page 17 for Waveforms.

3-7. SCHEMATIC DIAGRAM — CD MECHANISM SECTION —

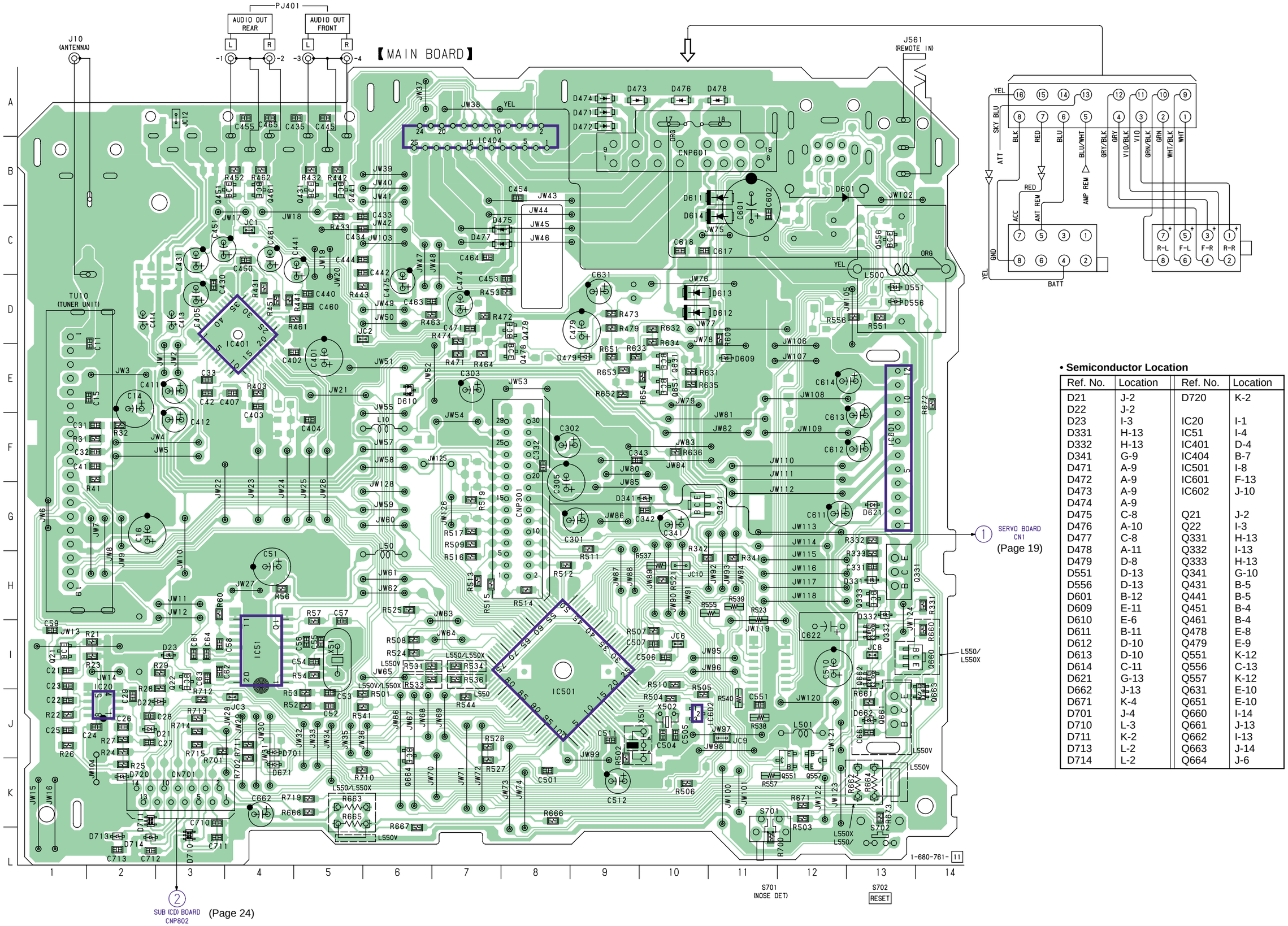
• Refer to page 29 for IC Block Diagrams.



Note:

- Voltage is dc with respect to ground under no-signal conditions. no mark : CD PLAY

3-8. PRINTED WIRING BOARD — MAIN SECTION —



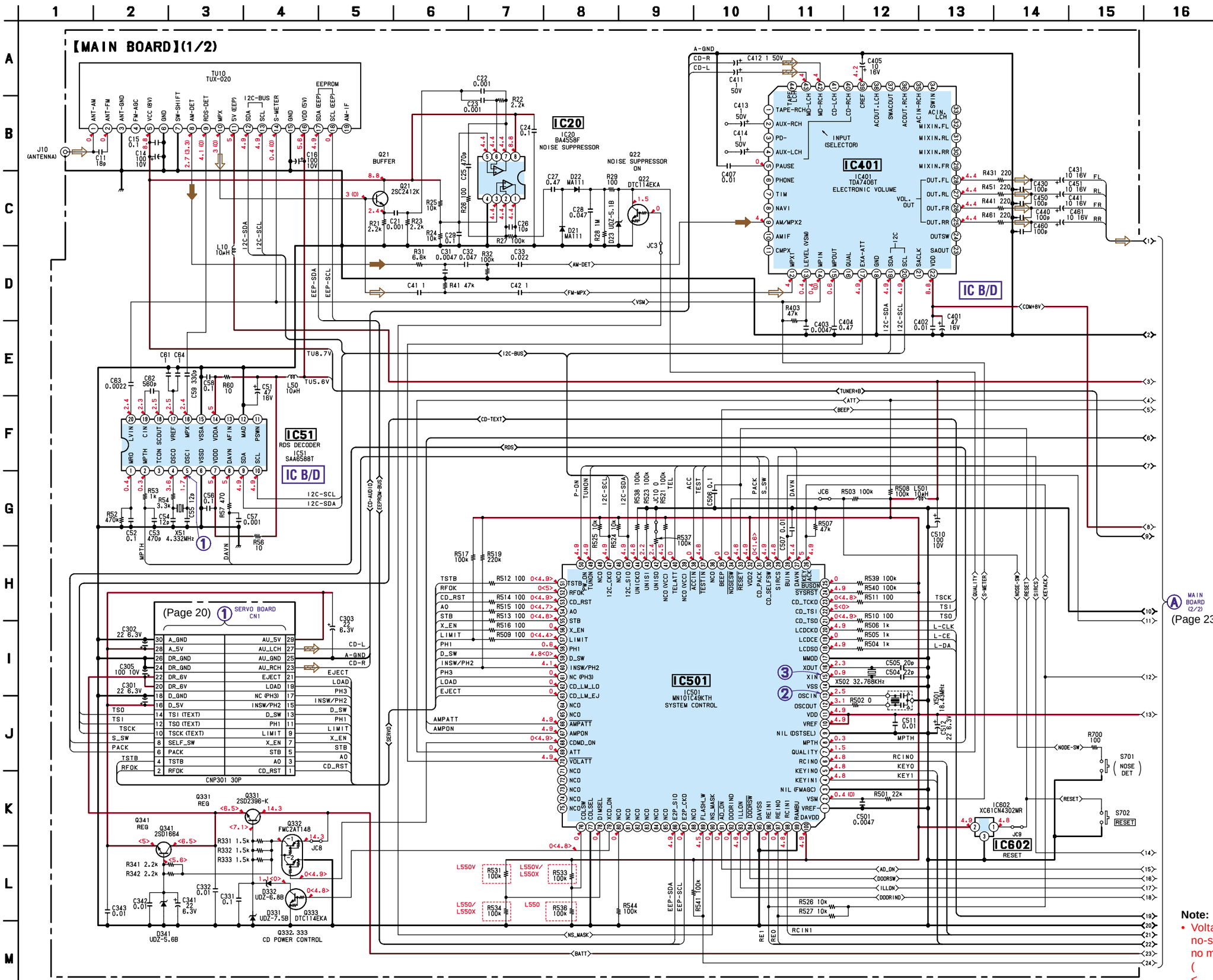
• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D21	J-2	D720	K-2
D22	J-2		
D23	I-3	IC20	I-1
D331	H-13	IC51	I-4
D332	H-13	IC401	D-4
D341	G-9	IC404	B-7
D471	A-9	IC501	I-8
D472	A-9	IC601	F-13
D473	A-9	IC602	J-10
D474	A-9		
D475	C-8	Q21	J-2
D476	A-10	Q22	I-3
D477	C-8	Q331	H-13
D478	A-11	Q332	I-13
D479	D-8	Q333	H-13
D551	D-13	Q341	G-10
D556	D-13	Q431	B-5
D601	B-12	Q441	B-5
D609	E-11	Q451	B-4
D610	E-6	Q461	B-4
D611	B-11	Q478	E-8
D612	D-10	Q479	E-9
D613	D-10	Q551	K-12
D614	C-11	Q556	C-13
D621	G-13	Q557	K-12
D662	J-13	Q631	E-10
D671	K-4	Q651	E-10
D701	J-4	Q660	I-14
D710	L-3	Q661	J-13
D711	K-2	Q662	I-13
D713	L-2	Q663	J-14
D714	L-2	Q664	J-6

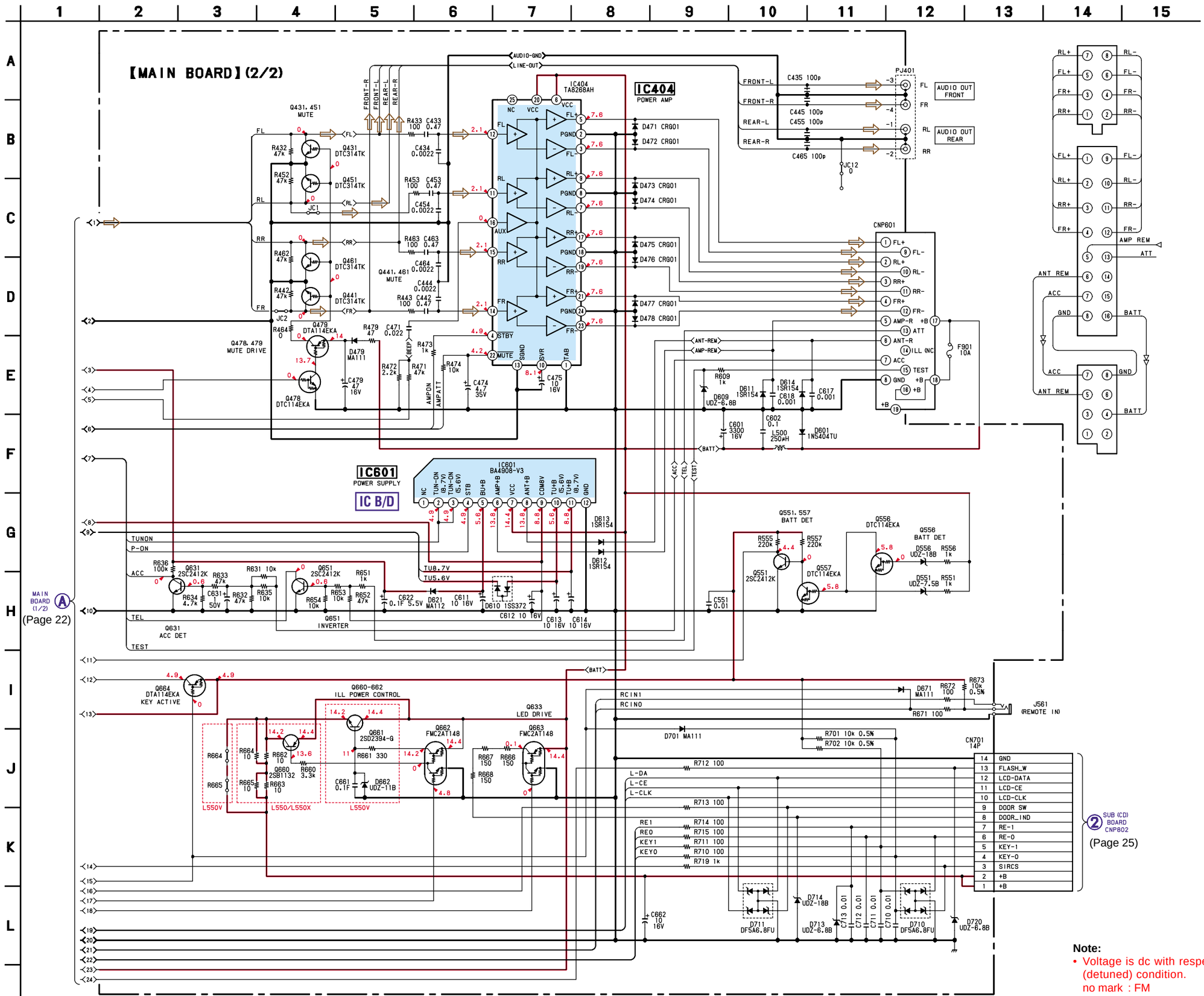
• Refer to page 17 for Waveforms.

3-9. SCHEMATIC DIAGRAM — MAIN SECTION (1/2) —

• Refer to page 29 for IC Block Diagrams.

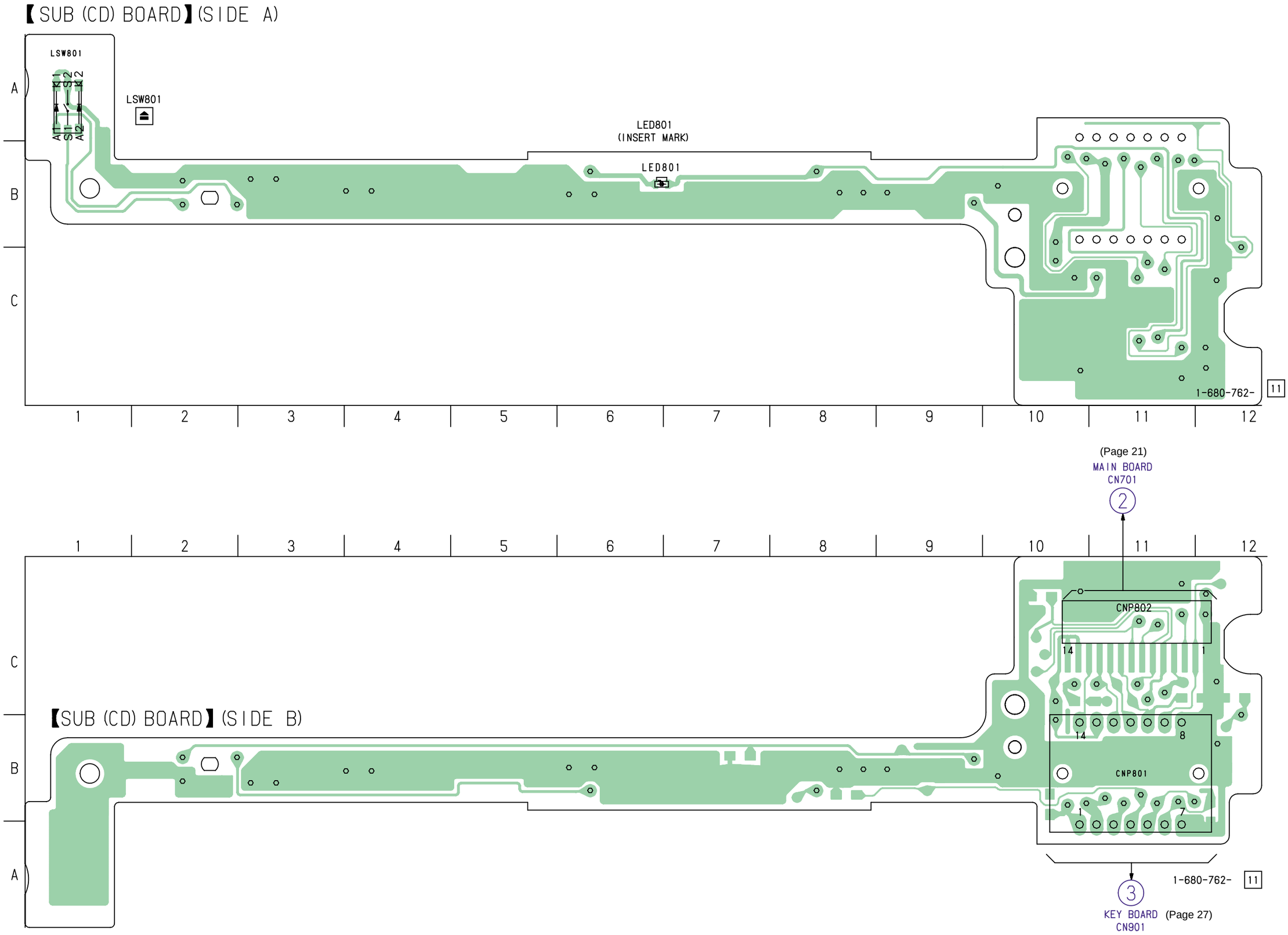


3-10. SCHEMATIC DIAGRAM — MAIN SECTION (2/2) — • Refer to page 29 for IC Block Diagrams.

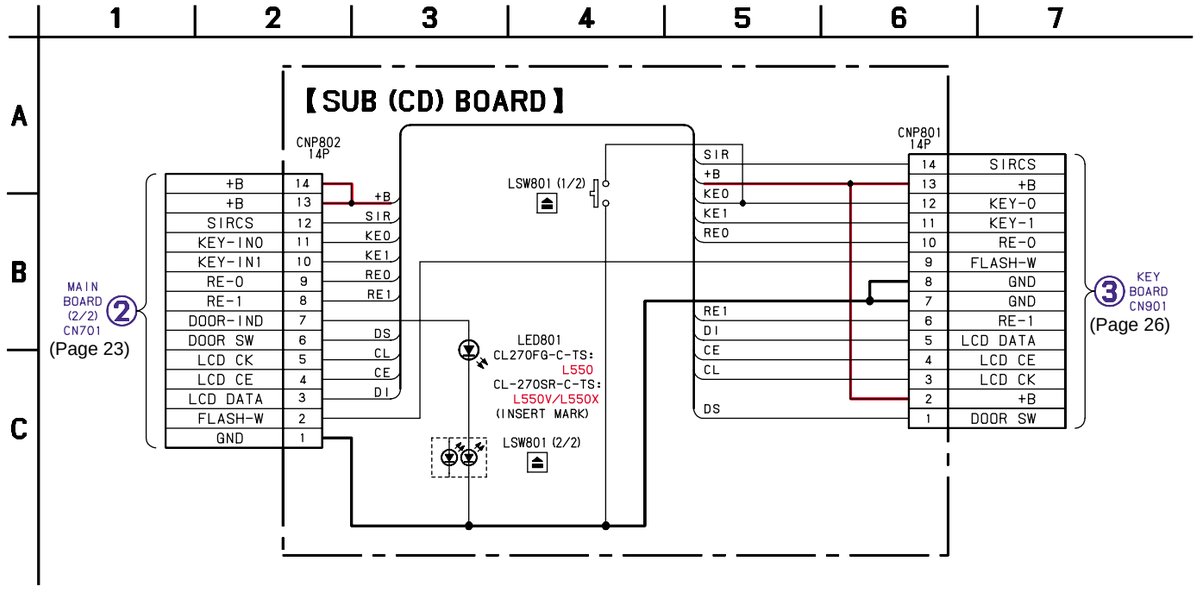


Note:
- Voltage is dc with respect to ground under no-signal (detuned) condition.
  no mark : FM

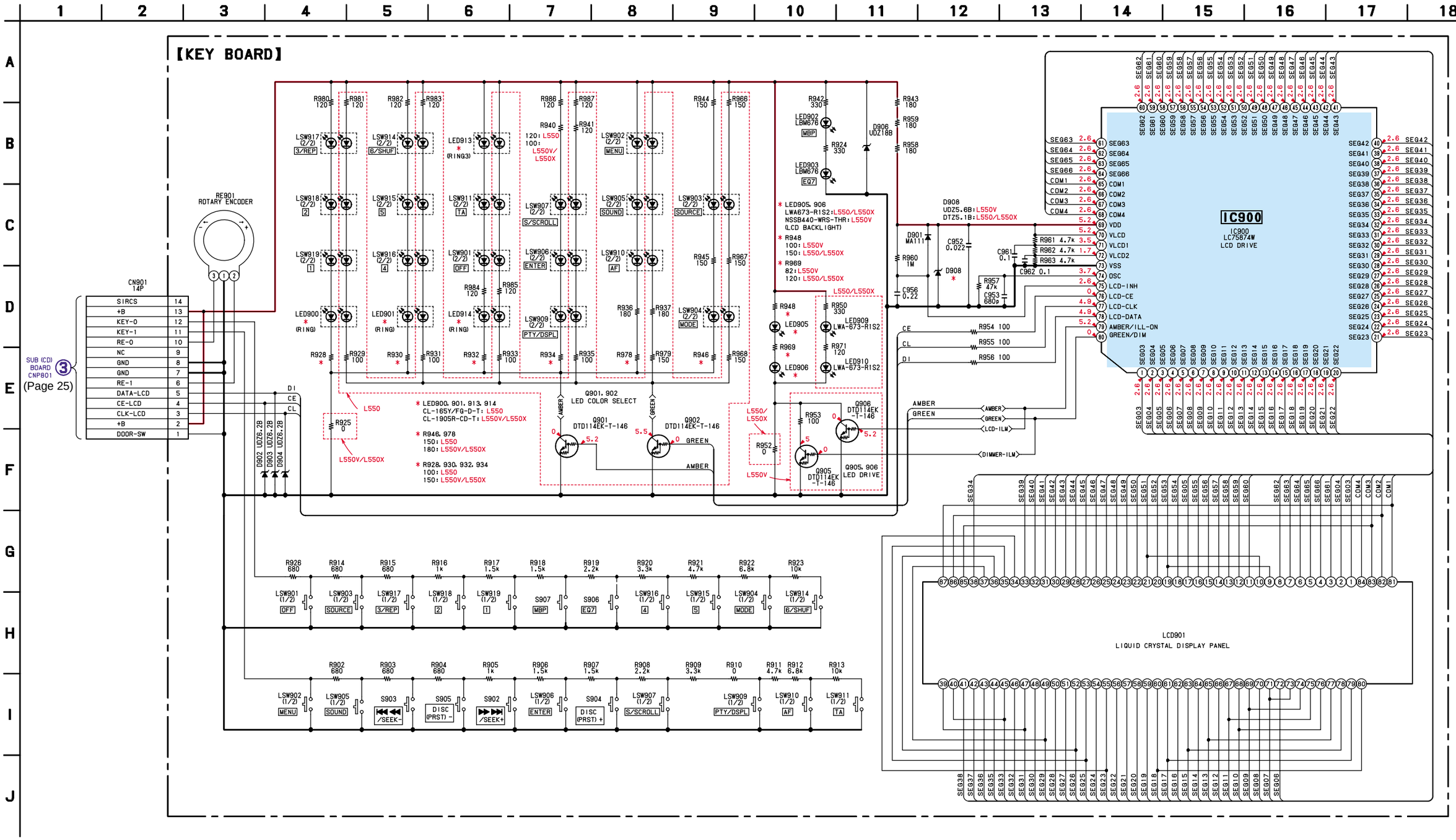
3-11. PRINTED WIRING BOARD — SUB (CD) SECTION —



3-12. SCHEMATIC DIAGRAM — SUB (CD) SECTION —



3-13. SCHEMATIC DIAGRAM — KEY SECTION —

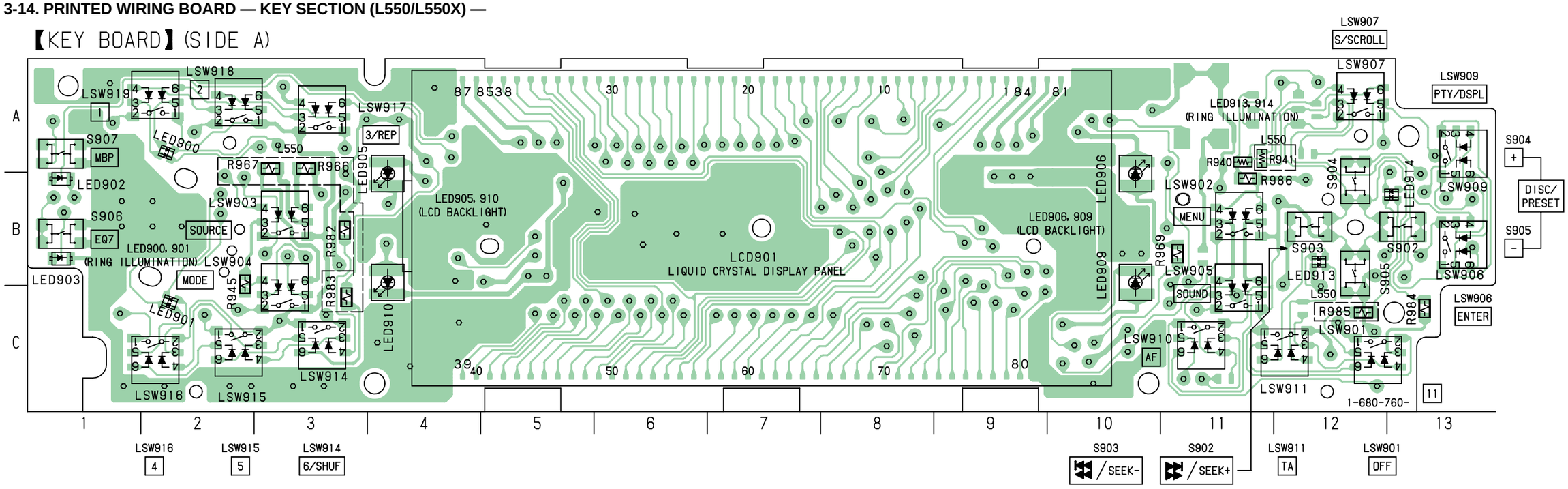


Note:

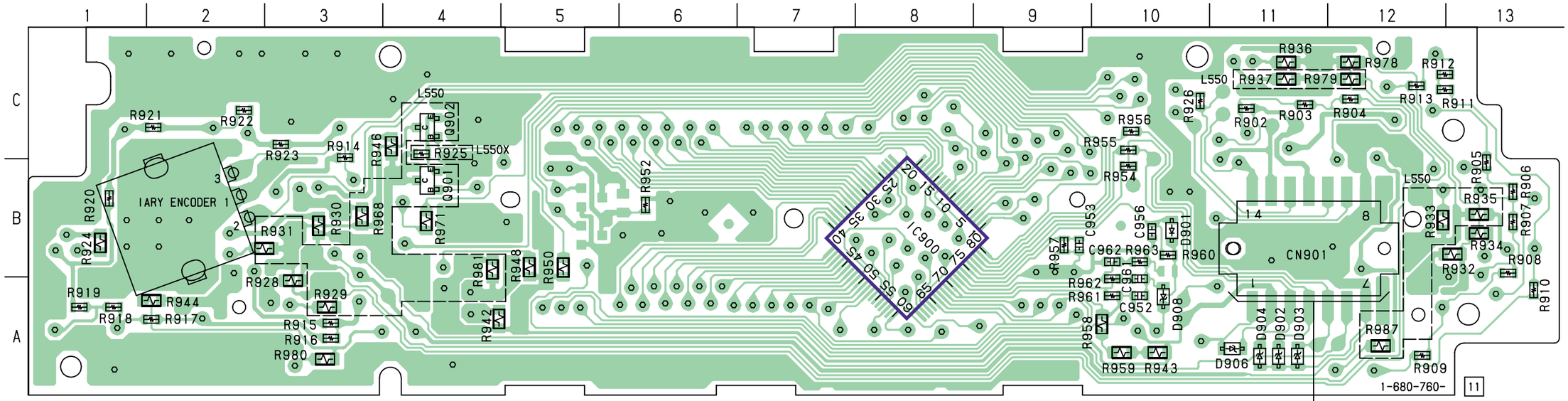
- Voltage is dc with respect to ground under no-signal (detuned) condition.
  no mark : FM

3-14. PRINTED WIRING BOARD — KEY SECTION (L550/L550X) —

【KEY BOARD】(SIDE A)



【KEY BOARD】(SIDE B)



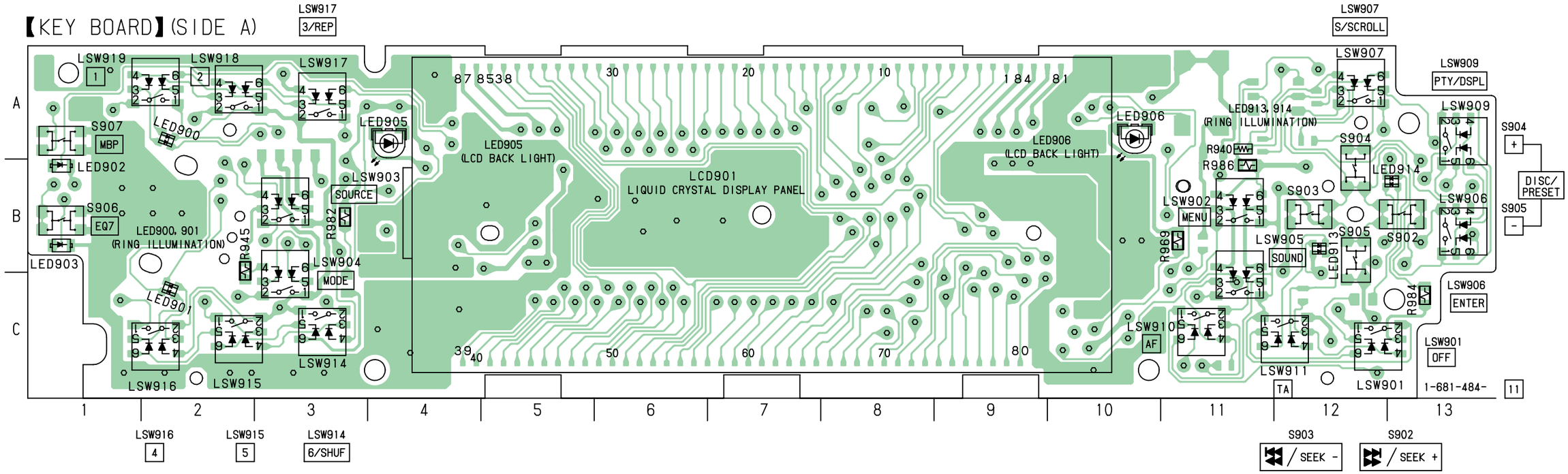
3
SUB (CD) BOARD
CNP801
(Page 24)

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
(D901)	C-10	LED902	B-1
(D902)	C-11	LED903	B-1
(D903)	C-11	LED905	A-4
(D904)	C-11	LED906	A-10
(D906)	C-11	LED909	B-10
(D908)	C-10	LED910	B-4
		LED913	B-12
(IC900)	C-8	LED914	B-13
LED900	A-2	(Q901)	B-4
LED901	C-2	(Q902)	C-4

( ) : SIDE B

3-15. PRINTED WIRING BOARD — KEY SECTION (L550V) —



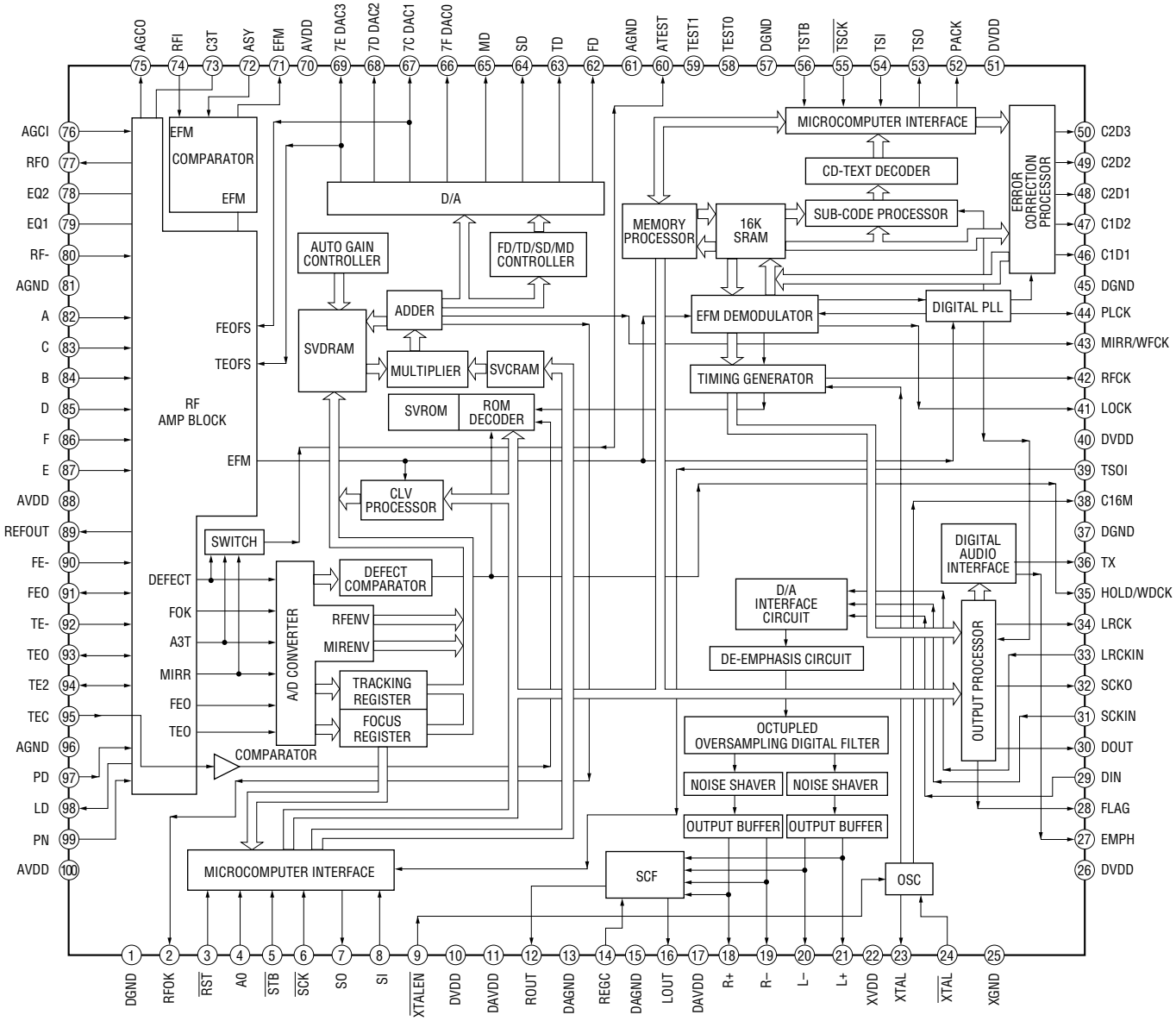
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
(D901)	B-10	LED901	C-2
(D902)	C-11	LED902	B-1
(D903)	C-11	LED903	B-1
(D904)	C-11	LED905	A-4
(D906)	C-11	LED906	A-10
(D908)	C-10	LED913	B-12
		LED914	B-13
(IC900)	B-8		
		(Q905)	B-5
LED900	A-2	(Q906)	B-5

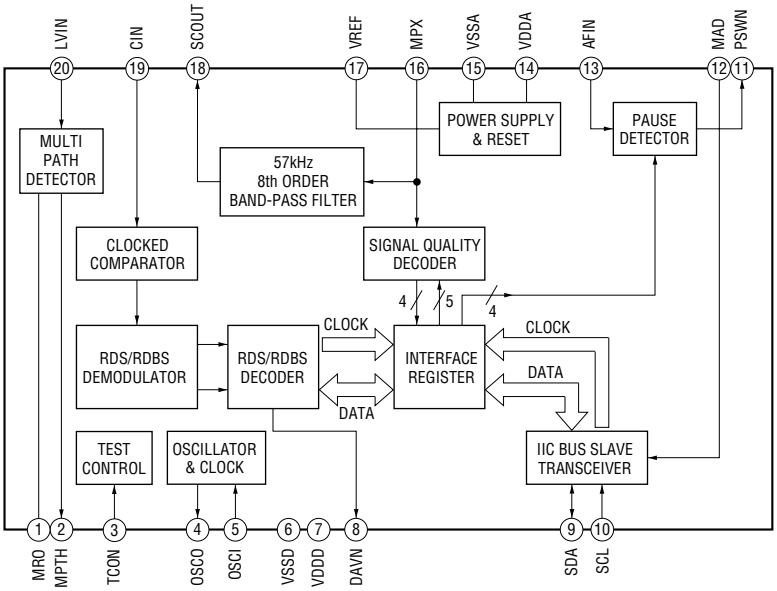
( ) : SIDE B

• IC Block Diagrams

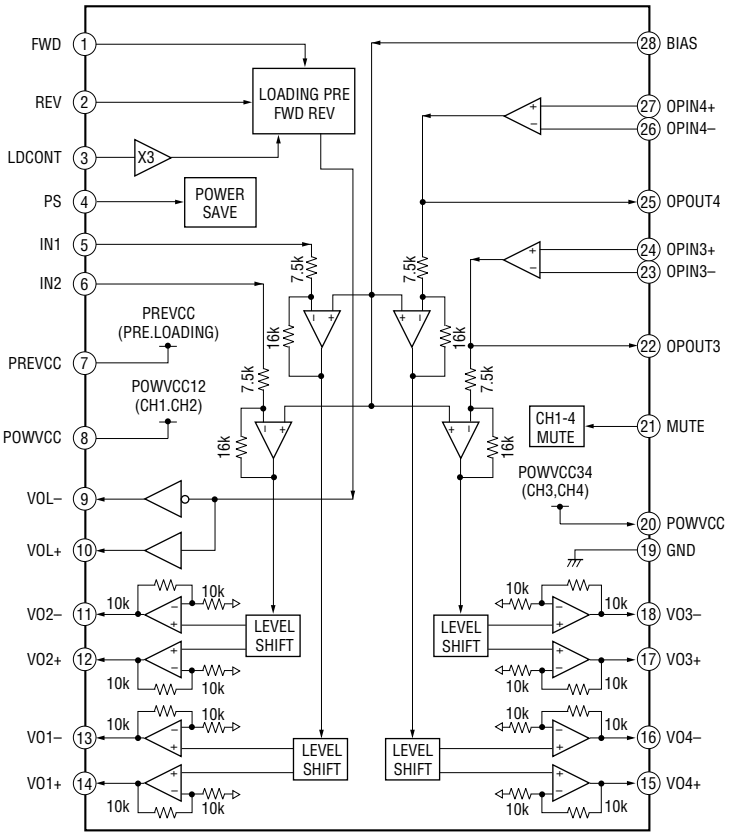
IC1 µPD63711GC-8EB



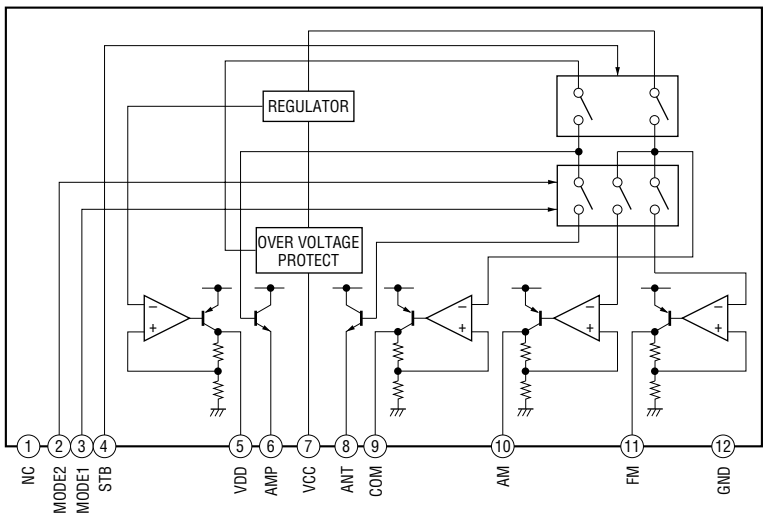
IC51 SAA6588T



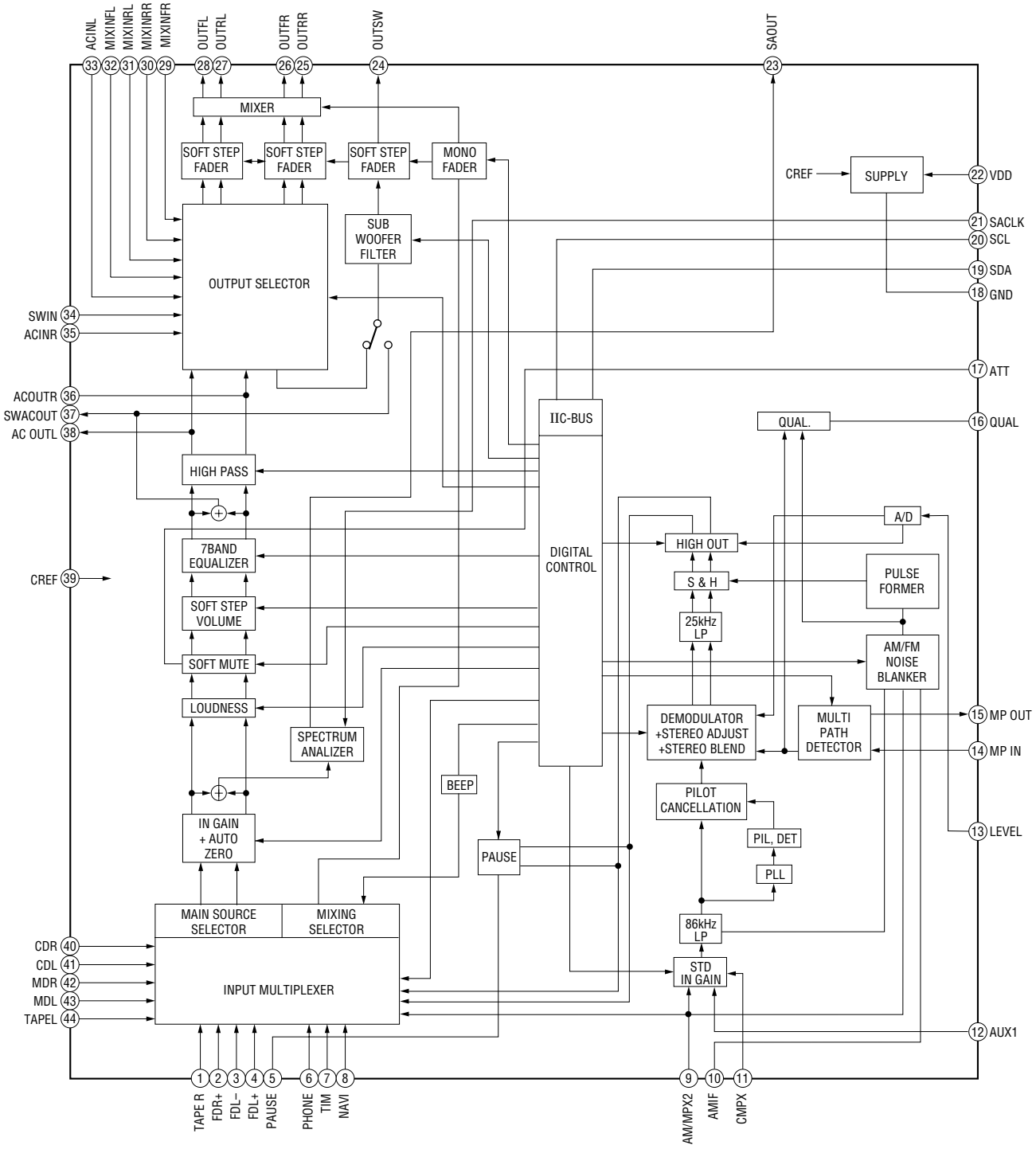
IC2 BA5810FP



IC601 BA4908-V3



IC401 TDA7406T



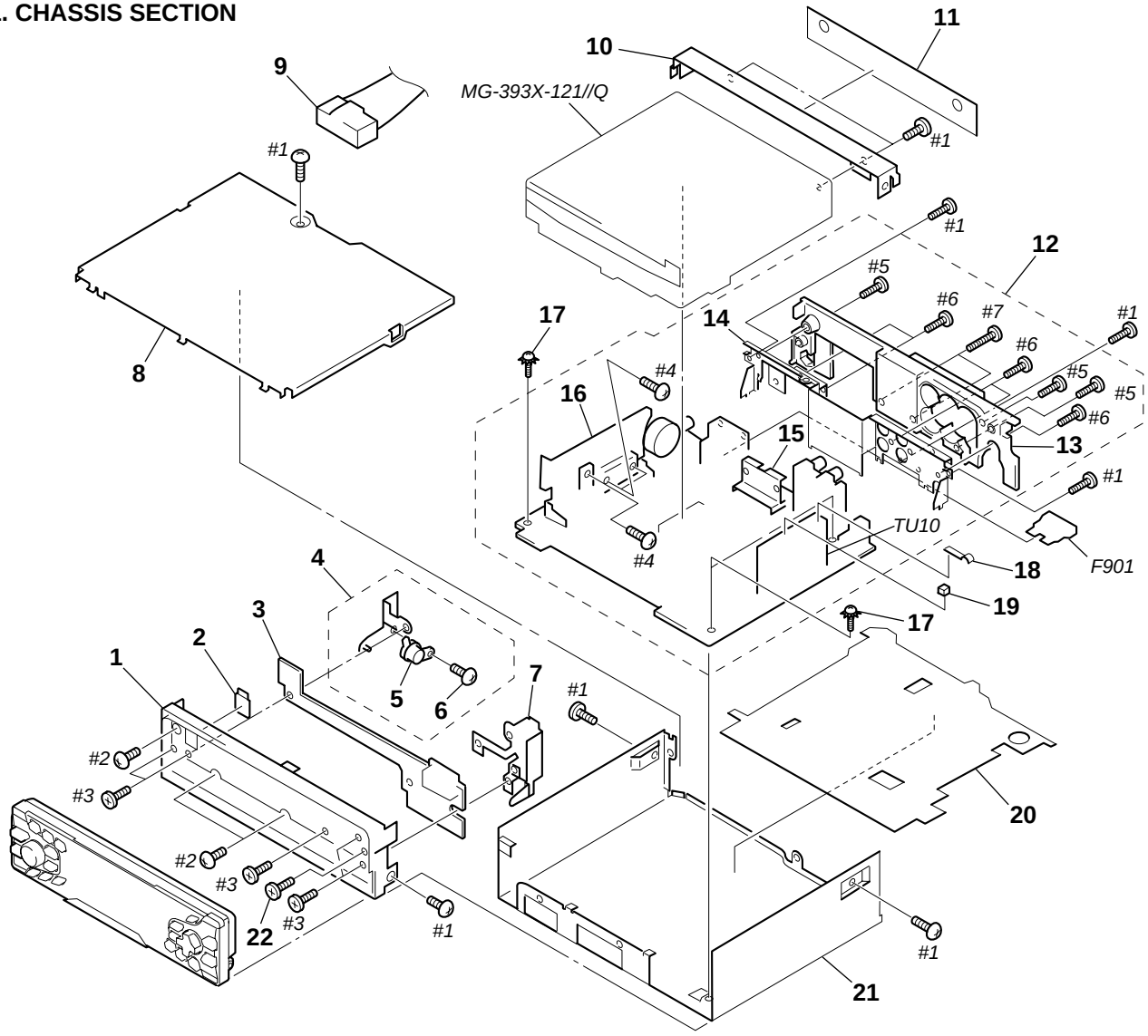
SECTION 4
EXPLODED VIEWS

NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.

- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ... (RED)
  ↑ Parts Color ↑ Cabinet's Color
- Accessories and packing materials and hardware (# mark) list are given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

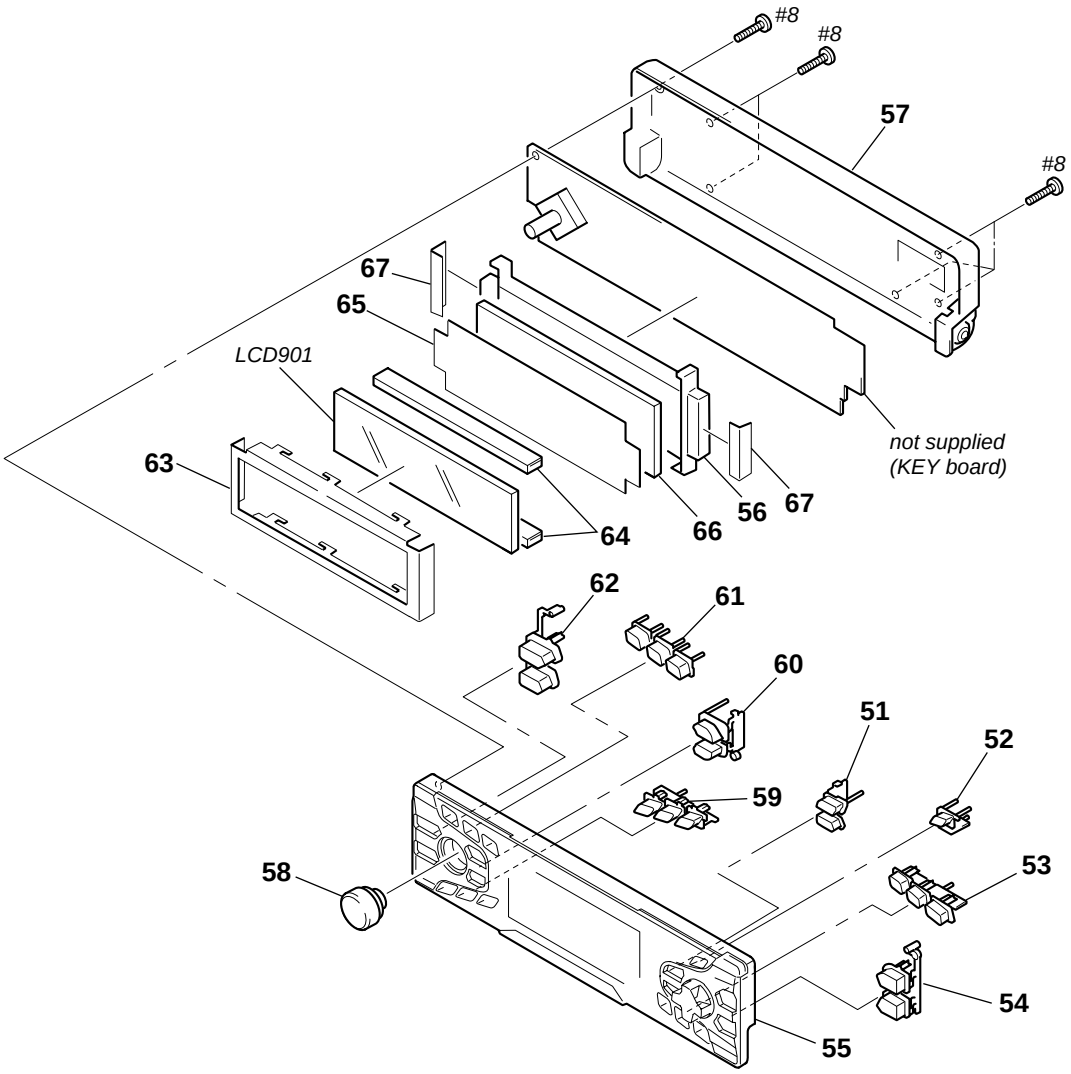
4-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
1	X-3378-512-1	PANEL ASSY, SUB	
2	3-040-990-01	BUTTON (EJECT)	
* 3	1-680-762-11	SUB (CD) BOARD	
4	X-3376-699-1	GEAR ASSY	
5	3-030-909-02	DAMPER, OIL	
6	3-713-786-51	SCREW +P 2X3	
7	X-3377-621-1	LOCK ASSY	
* 8	3-223-782-01	COVER	
9	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER)	
* 10	3-041-012-01	BRACKET (CD)	
* 11	3-227-287-01	SHEET, DUST PROTECTION	
* 12	3-223-783-11	CHASSIS (BACK)	
* 13	3-223-780-01	HEAT SINK	

Ref. No.	Part No.	Description	Remark
* 14	A-3326-835-A	MAIN BOARD, COMPLETE (L550X)	
* 14	A-3326-838-A	MAIN BOARD, COMPLETE (L550V)	
* 14	A-3326-843-A	MAIN BOARD, COMPLETE (L550)	
* 15	3-040-998-01	BRACKET (IC)	
* 16	3-041-011-01	HEAT SINK (REG)	
17	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT	
* 18	3-045-878-01	PLATE (TU), GROUND	
* 19	3-045-877-01	CUSHION (TU)	
* 20	3-224-755-01	SHEET, INSULATING	
* 21	3-223-781-01	CHASSIS	
22	3-047-812-01	SCREW (LOCK)	
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
TU10	A-3282-061-A	TUNER UNIT (TUX-020)	

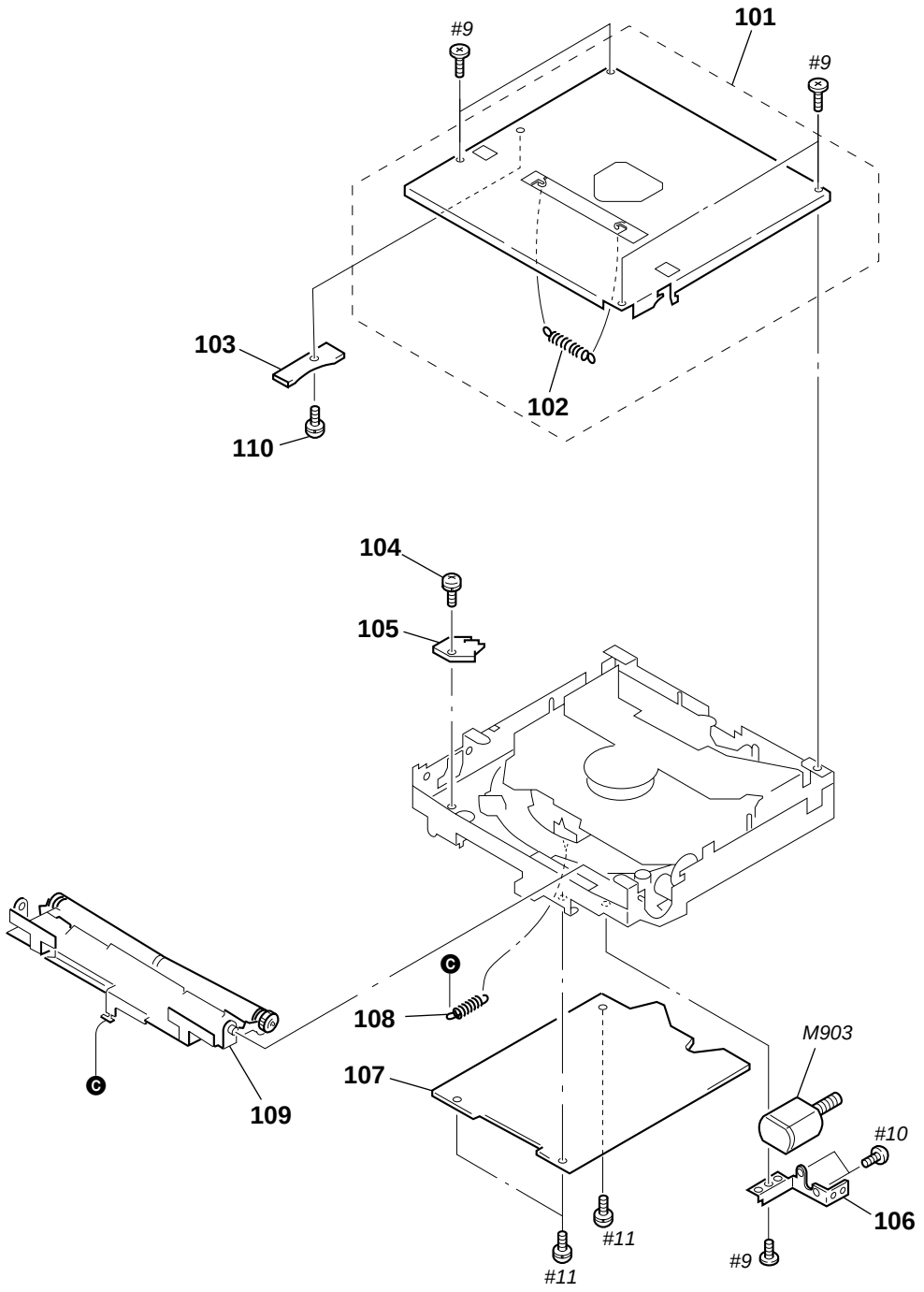
4-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	3-223-791-01	BUTTON (MENU/SOUND)	
52	3-223-789-11	BUTTON (DSPL/SCRL)	
53	3-223-792-01	BUTTON (AF/TA/OFF)	
54	3-223-790-11	BUTTON (LIST/ENTER)	
55	X-3380-526-1	SUB ASSY, PANEL (L550)	
55	X-3380-527-1	SUB ASSY, PANEL (L550X)	
55	X-3380-528-1	SUB ASSY, PANEL (L550V)	
* 56	3-223-798-01	HOLDER (LCD)	
57	X-3380-079-1	PANEL ASSY, FRONT BACK	
58	X-3380-080-1	KNOB (VOL) ASSY (L550V/L550X)	
58	X-3380-081-1	KNOB (VOL) ASSY (L550)	
59	3-223-751-01	BUTTON (4-6)	

Ref. No.	Part No.	Description	Remark
60	3-223-753-01	BUTTON (SOURCE/MODE)	
61	3-223-750-01	BUTTON (1-3)	
62	3-223-752-11	BUTTON (DSO/EQ7)	
* 63	3-223-799-01	PLATE (LCD), GROUND	
64	1-694-780-11	CONDUCTIVE BOARD, CONNECTION	
* 65	3-223-800-01	ILLUMINATOR (LCD) (L550/L550X)	
* 65	3-231-293-01	ILLUMINATOR (LCD/V) (L550V)	
* 66	3-223-797-01	PLATE (LCD), LIGHT GUIDE	
* 67	3-231-648-01	SHEET (LIGHT INTERSEPTION) (L550V)	
LCD901	1-804-292-21	DISPLAY PANEL, LIQUID CRYSTAL (L550)	
LCD901	1-804-292-41	DISPLAY PANEL, LIQUID CRYSTAL (L550X)	
LCD901	1-804-293-11	DISPLAY PANEL, LIQUID CRYSTAL (L550V)	

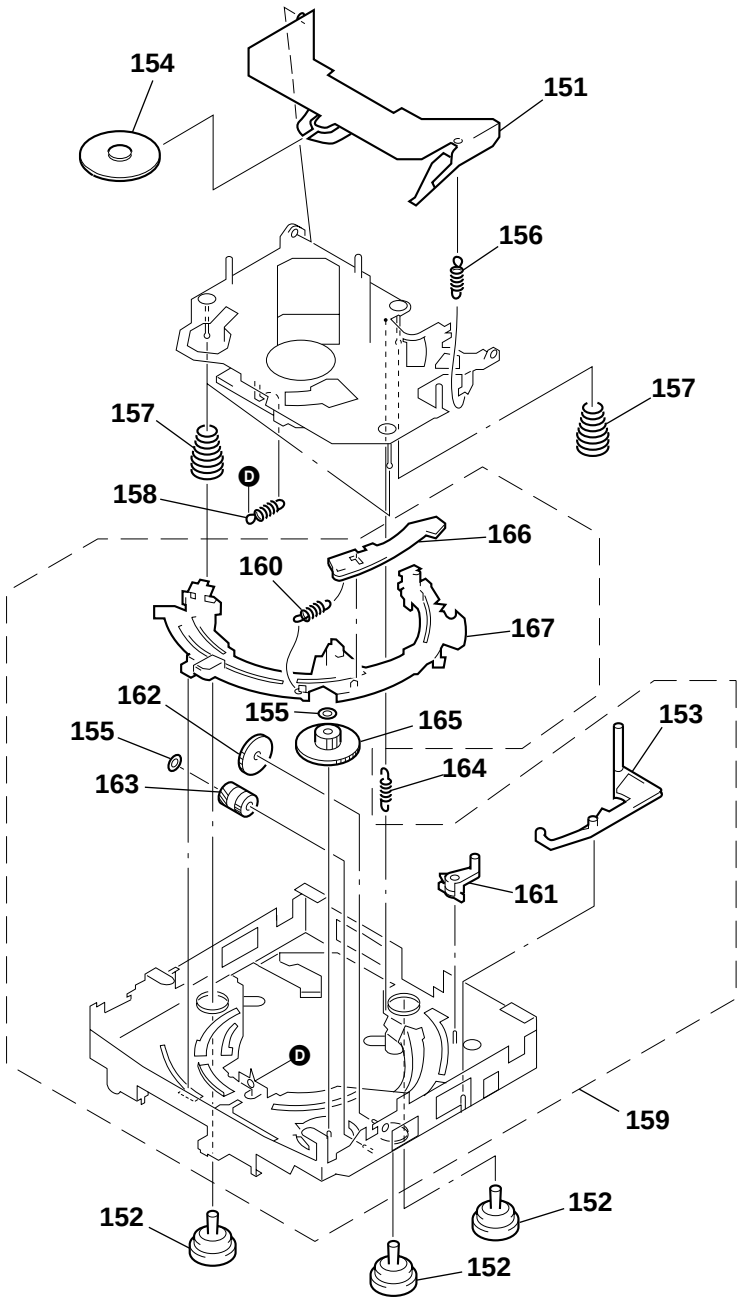
4-3. CD MECHANISM SECTION (1)
(MG-393X-121//Q)



Ref. No.	Part No.	Description	Remark
101	A-3315-247-A	CHASSIS (T.U) ASSY	
102	3-931-909-01	SPRING (LR), TENSION	
* 103	1-659-836-11	DISC IN BOARD	
104	3-338-737-01	SCREW (2X3), +PS	
* 105	1-659-837-11	LOAD BOARD	
* 106	3-039-629-01	BRACKET (MOTOR)	

Ref. No.	Part No.	Description	Remark
* 107	A-3283-047-A	SERVO BOARD, COMPLETE	
108	3-225-784-01	SPRING (RA3), TENSION	
109	A-3315-040-A	ROLLER ASSY, ARM	
110	3-338-737-01	SCREW (2X3), +PS	
M903	A-3315-039-A	MOTOR SUB ASSY, LD (LOADING)	

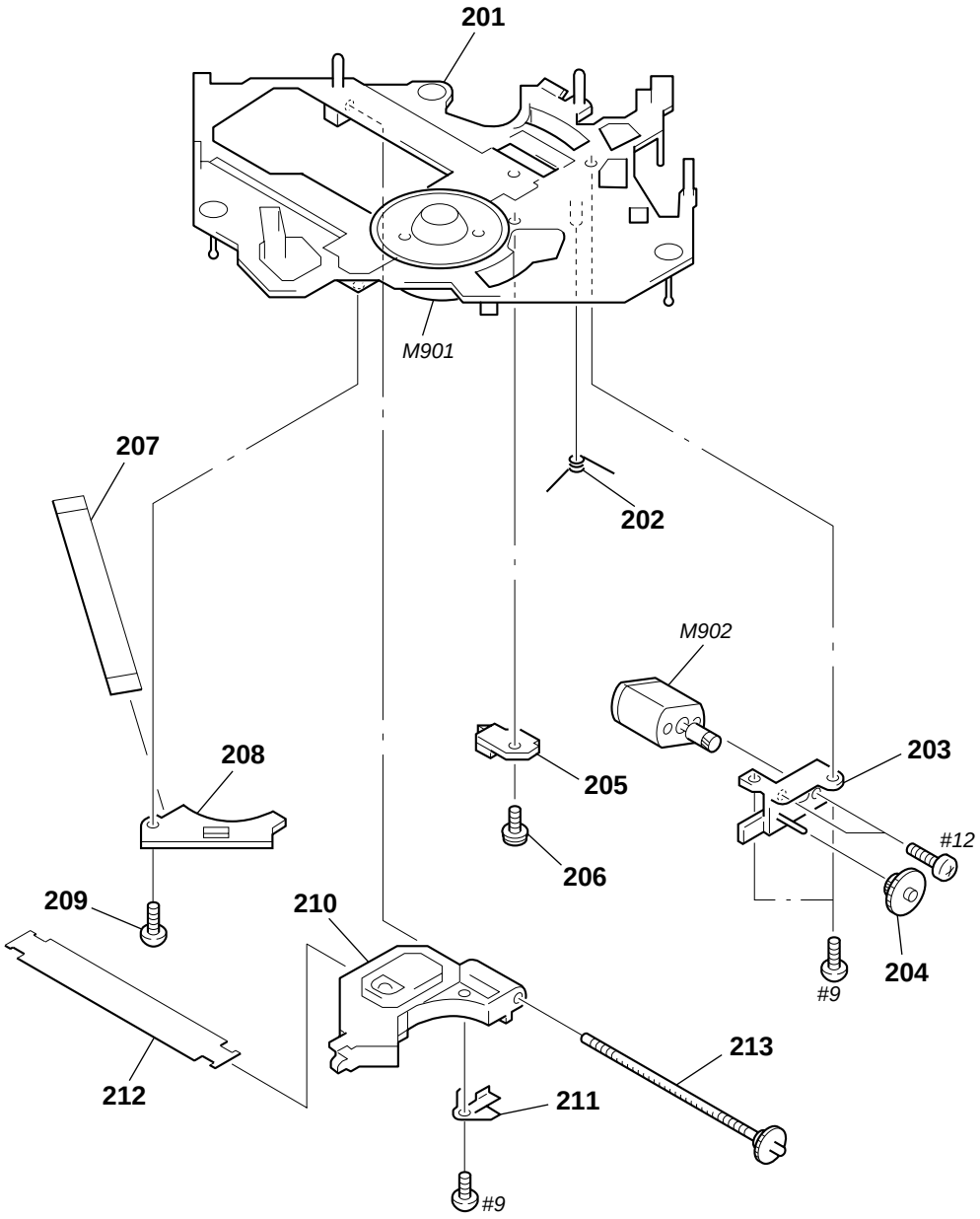
4-4. CD MECHANISM SECTION (2)
(MG-393X-121//Q)



Ref. No.	Part No.	Description	Remark
151	X-3378-956-1	ARM ASSY, CHUCKING	
152	3-931-897-61	DAMPER (T)	
153	3-039-627-01	LEVER (D)	
154	3-040-165-01	RETAINER (DISC)	
155	3-018-272-01	WASHER	
156	3-931-895-01	SPRING (CH), TENSION	
157	3-931-898-01	SPRING (FL), COMPRESSION	
158	3-032-483-01	SPRING (KF1), TENSION	
159	A-3315-243-A	CHASSIS (M) ASSY	

Ref. No.	Part No.	Description	Remark
160	3-220-180-01	SPRING (TR2), TENSION	
161	3-931-881-01	LEVER (LOCK)	
162	3-931-882-02	GEAR (MDL)	
163	3-007-537-11	WHEEL (U), WORM	
164	3-032-484-01	SPRING (KR1), TENSION	
165	3-014-727-01	WHEEL (LW), WORM	
166	3-039-626-01	LEVER (TR)	
167	3-225-093-21	RING, LOADING	

4-5. CD MECHANISM SECTION (3)
(MG-393X-121//Q)



The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
201	X-3378-598-1	CHASSIS (OP) ASSY (including M901)	
202	3-043-494-01	SPRING (SL), TORSION	
203	3-040-170-01	BASE (DRIVING)	
204	3-040-419-01	GEAR (MIDWAY)	
* 205	1-659-835-12	LIMIT BOARD	
206	3-338-737-01	SCREW (2X3), +PS	
207	1-659-880-11	MOTOR FLEXIBLE BOARD	
* 208	1-659-834-11	SUB BOARD	
209	3-909-607-01	SCREW	
⚠210	8-820-103-03	PICK-UP, OPTICAL KSS-720A/K1RP	
211	3-025-743-01	SPRING (FEED), LEAF	
212	1-676-707-21	PICK-UP FLEXIBLE BOARD	
213	A-3291-669-A	SHAFT (FEED) ASSY	
M902	A-3291-674-A	MOTOR ASSY, SLED (SLED)	

SECTION 5
ELECTRICAL PARTS LIST

DISC IN | KEY

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ, for example:
  uA.. : µA.. uPA.. : µPA..
  uPB.. : µPB.. uPC.. : µPC.. uPD.. : µPD..
- CAPACITORS
  uF : µF
- COILS
  uH : µH

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	1-659-836-11	DISC IN BOARD			
		**********			
		< SWITCH >			
SW1	1-572-288-21	SWITCH, PUSH (DISC IN)			
SW2	1-572-288-21	SWITCH, PUSH (SELF)			
**********					
		KEY BOARD			
		**********			
	1-694-780-11	CONDUCTIVE BOARD, CONNECTION			
*	3-223-797-01	PLATE (LCD), LIGHT GUIDE			
*	3-223-798-01	HOLDER (LCD)			
*	3-223-799-01	PLATE (LCD), GROUND			
*	3-223-800-01	ILLUMINATOR (LCD)			
		< CAPACITOR >			
C952	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C953	1-115-412-11	CERAMIC CHIP	680PF	5%	25V
C956	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C961	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C962	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
		< CONNECTOR >			
CN901	1-794-065-22	PLUG, CONNECTOR 14P			
		< DIODE >			
D901	8-719-073-01	DIODE MA111-(K8).S0			
D902	8-719-056-82	DIODE UDZ-TE-17-6.2B			
D903	8-719-056-82	DIODE UDZ-TE-17-6.2B			
D904	8-719-056-82	DIODE UDZ-TE-17-6.2B			
D906	8-719-056-93	DIODE UDZ-TE-17-18B			
D908	8-719-158-15	DIODE UDZ-TE-17-5.6B (L550V)			
D908	8-719-976-99	DIODE DTZ5.1B (L550/L550X)			
		< IC >			
IC900	8-759-826-21	IC LC75874W			
		< LIQUID CRYSTAL DISPLAY >			
LCD901	1-804-292-21	DISPLAY PANEL, LIQUID CRYSTAL (L550)			
LCD901	1-804-292-41	DISPLAY PANEL, LIQUID CRYSTAL (L550X)			
LCD901	1-804-293-11	DISPLAY PANEL, LIQUID CRYSTAL (L550V)			

Ref. No.	Part No.	Description	Remark
		< DIODE >	
LED900	8-719-061-16	LED CL-190SR-CD-T (RING ILLUMINATION)	(L550V/L550X)
LED900	8-719-082-91	LED CL-165Y/FG-D-T (RING ILLUMINATION)	(L550)
LED901	8-719-061-16	LED CL-190SR-CD-T (RING ILLUMINATION)	(L550V/L550X)
LED901	8-719-082-91	LED CL-165Y/FG-D-T (RING ILLUMINATION)	(L550)
LED902	8-719-082-81	LED LBM676 (MBP)	
LED903	8-719-082-81	LED LBM676 (EQ7)	
LED905	8-719-078-19	LED LWA673-R1S2 (LCD BACK LIGHT)	(L550/L550X)
LED905	8-719-084-37	LED NSSB440-WRS-THR (LCD BACK LIGHT)	(L550V)
LED906	8-719-078-19	LED LWA673-R1S2 (LCD BACK LIGHT)	(L550/L550X)
LED906	8-719-084-37	LED NSSB440-WRS-THR (LCD BACK LIGHT)	(L550V)
LED909	8-719-078-19	LED LWA673-R1S2 (LCD BACK LIGHT)	(L550/L550X)
LED910	8-719-078-19	LED LWA673-R1S2 (LCD BACK LIGHT)	(L550/L550X)
LED913	8-719-061-16	LED CL-190SR-CD-T (RING ILLUMINATION)	(L550V/L550X)
LED913	8-719-082-91	LED CL-165Y/FG-D-T (RING ILLUMINATION)	(L550)
LED914	8-719-061-16	LED CL-190SR-CD-T (RING ILLUMINATION)	(L550V/L550X)
LED914	8-719-082-91	LED CL-165Y/FG-D-T (RING ILLUMINATION)	(L550)
		< SWITCH >	
LSW901	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (OFF)	(L550V/L550X)
LSW901	1-786-112-11	SWITCH, KEYBOARD (WITH LED) (OFF) (L550)	
LSW902	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (MENU)	(L550V/L550X)
LSW902	1-786-112-11	SWITCH, KEYBOARD (WITH LED) (MENU)	(L550)
LSW903	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (SOURCE)	(L550V/L550X)
LSW903	1-786-112-11	SWITCH, KEYBOARD (WITH LED) (SOURCE)	(L550)
LSW904	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (MODE)	(L550V/L550X)

KEY

Ref. No.	Part No.	Description	Remark
LSW904	1-786-112-11	SWITCH, KEYBOARD (WITH LED) (MODE)	(L550)
LSW905	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (SOUND)	(L550V/L550X)
LSW905	1-786-112-11	SWITCH, KEYBOARD (WITH LED) (SOUND)	(L550)
LSW906	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (ENTER)	(L550V/L550X)
LSW906	1-786-112-11	SWITCH, KEYBOARD (WITH LED) (ENTER)	(L550)
LSW907	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (S/SCROLL)	(L550V/L550X)
LSW907	1-786-112-11	SWITCH, KEYBOARD (WITH LED) (S/SCROLL)	(L550)
LSW909	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (PTY/DSPL)	(L550V/L550X)
LSW909	1-786-112-11	SWITCH, KEYBOARD (WITH LED) (PTY/DSPL)	(L550)
LSW910	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (AF)	(L550V/L550X)
LSW910	1-786-112-11	SWITCH, KEYBOARD (WITH LED) (AF) (L550)	
LSW911	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (TA)	(L550V/L550X)
LSW911	1-786-112-11	SWITCH, KEYBOARD (WITH LED) (TA) (L550)	
LSW914	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (6/SHUF)	(L550V/L550X)
LSW914	1-786-112-11	SWITCH, KEYBOARD (WITH LED) (6/SHUF)	(L550)
LSW915	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (5)	(L550V/L550X)
LSW915	1-786-112-11	SWITCH, KEYBOARD (WITH LED) (5) (L550)	
LSW916	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (4)	(L550V/L550X)
LSW916	1-786-112-11	SWITCH, KEYBOARD (WITH LED) (4) (L550)	
LSW917	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (3/REP)	(L550V/L550X)
LSW917	1-786-112-11	SWITCH, KEYBOARD (WITH LED) (3/REP)	(L550)
LSW918	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (2)	(L550V/L550X)
LSW918	1-786-112-11	SWITCH, KEYBOARD (WITH LED) (2) (L550)	
LSW919	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (1)	(L550V/L550X)
LSW919	1-786-112-11	SWITCH, KEYBOARD (WITH LED) (1) (L550)	
		< TRANSISTOR >	
Q901	8-729-904-75	TRANSISTOR DTD114EK (L550)	
Q902	8-729-904-75	TRANSISTOR DTD114EK (L550)	
Q905	8-729-904-75	TRANSISTOR DTD114EK-T-146 (L550V)	
Q906	8-729-904-75	TRANSISTOR DTD114EK-T-146 (L550V)	
		< RESISTOR >	
R902	1-216-819-11	METAL CHIP 680 5% 1/16W	
R903	1-216-819-11	METAL CHIP 680 5% 1/16W	
R904	1-216-819-11	METAL CHIP 680 5% 1/16W	
R905	1-216-821-11	METAL CHIP 1K 5% 1/16W	
R906	1-216-823-11	METAL CHIP 1.5K 5% 1/16W	

Ref. No.	Part No.	Description			Remark
R907	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R908	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R909	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R910	1-216-864-11	SHORT	0		
R911	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R912	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R913	1-216-833-11	METAL CHIP	10K	5%	1/16W
R914	1-216-819-11	METAL CHIP	680	5%	1/16W
R915	1-216-819-11	METAL CHIP	680	5%	1/16W
R916	1-216-821-11	METAL CHIP	1K	5%	1/16W
R917	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R918	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R919	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R920	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R921	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R922	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R923	1-216-833-11	METAL CHIP	10K	5%	1/16W
R924	1-216-037-00	METAL CHIP	330	5%	1/10W
R925	1-216-864-11	SHORT	0		(L550V/L550X)
R926	1-216-819-11	METAL CHIP	680	5%	1/16W
R928	1-216-025-11	RES-CHIP	100	5%	1/10W (L550)
R928	1-216-029-00	METAL CHIP	150	5%	1/10W (L550V/L550X)
R929	1-216-025-11	RES-CHIP	100	5%	1/10W (L550)
R930	1-216-025-11	RES-CHIP	100	5%	1/10W (L550)
R930	1-216-029-00	METAL CHIP	150	5%	1/10W (L550V/L550X)
R931	1-216-025-11	RES-CHIP	100	5%	1/10W (L550)
R932	1-216-025-11	RES-CHIP	100	5%	1/10W (L550)
R932	1-216-029-00	METAL CHIP	150	5%	1/10W (L550V/L550X)
R933	1-216-025-11	RES-CHIP	100	5%	1/10W (L550)
R934	1-216-025-11	RES-CHIP	100	5%	1/10W (L550)
R934	1-216-029-00	METAL CHIP	150	5%	1/10W (L550V/L550X)
R935	1-216-025-11	RES-CHIP	100	5%	1/10W (L550)
R936	1-216-031-00	METAL CHIP	180	5%	1/10W
R937	1-216-031-00	METAL CHIP	180	5%	1/10W (L550)
R940	1-216-809-11	METAL CHIP	100	5%	1/16W (L550V/L550X)
R940	1-216-810-11	METAL CHIP	120	5%	1/16W (L550)
R941	1-216-810-11	METAL CHIP	120	5%	1/16W (L550)
R942	1-216-037-00	METAL CHIP	330	5%	1/10W
R943	1-216-031-00	METAL CHIP	180	5%	1/10W
R944	1-216-029-00	METAL CHIP	150	5%	1/10W

Ref. No.	Part No.	Description			Remark
R945	1-216-029-00	METAL CHIP	150	5%	1/10W
R946	1-216-029-00	METAL CHIP	150	5%	1/10W (L550)
R946	1-216-031-00	METAL CHIP	180	5%	1/10W (L550V/L550X)
R948	1-216-025-11	RES-CHIP	100	5%	1/10W (L550V)
R948	1-216-029-00	METAL CHIP	150	5%	1/10W (L550/L550X)
R950	1-216-029-00	METAL CHIP	150	5%	1/10W (L550/L550X)
R952	1-216-864-11	SHORT	0		(L550/L550X)
R953	1-216-037-00	METAL CHIP	330	5%	1/10W (L550V)
R954	1-216-809-11	METAL CHIP	100	5%	1/16W
R955	1-216-809-11	METAL CHIP	100	5%	1/16W
R956	1-216-809-11	METAL CHIP	100	5%	1/16W
R957	1-216-841-11	METAL CHIP	47K	5%	1/16W
R958	1-216-031-00	METAL CHIP	180	5%	1/10W
R959	1-216-031-00	METAL CHIP	180	5%	1/10W
R960	1-216-857-11	METAL CHIP	1M	5%	1/16W
R961	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R962	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R963	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R966	1-216-029-00	METAL CHIP	150	5%	1/10W (L550)
R967	1-216-029-00	METAL CHIP	150	5%	1/10W (L550)
R968	1-216-029-00	METAL CHIP	150	5%	1/10W (L550)
R969	1-216-023-00	METAL CHIP	82	5%	1/10W (L550V)
R969	1-216-027-00	METAL CHIP	120	5%	1/10W (L550/L550X)
R971	1-216-027-00	METAL CHIP	120	5%	1/10W (L550/L550X)
R978	1-216-029-00	METAL CHIP	150	5%	1/10W (L550)
R978	1-216-031-00	METAL CHIP	180	5%	1/10W (L550V/L550X)
R979	1-216-029-00	METAL CHIP	150	5%	1/10W (L550)
R980	1-216-027-00	METAL CHIP	120	5%	1/10W
R981	1-216-027-00	METAL CHIP	120	5%	1/10W (L550)
R982	1-216-027-00	METAL CHIP	120	5%	1/10W
R983	1-216-027-00	METAL CHIP	120	5%	1/10W (L550)
R984	1-216-027-00	METAL CHIP	120	5%	1/10W
R985	1-216-027-00	METAL CHIP	120	5%	1/10W (L550)
R986	1-216-027-00	METAL CHIP	120	5%	1/10W
R987	1-216-027-00	METAL CHIP	120	5%	1/10W (L550)

Ref. No.	Part No.	Description	Remark
		< ROTARY ENCODER >	
RE901	1-476-507-11	ENCODER, ROTARY	
		< SWITCH >	
S902	1-771-884-11	SWITCH, TACTILE (WITH LED)	(►► ►►I/SEEK +)
S903	1-771-884-11	SWITCH, TACTILE (WITH LED)	(I◄◄ ◄◄/SEEK –)
S904	1-771-884-11	SWITCH, TACTILE (WITH LED)	(DISC (PRST) +)
S905	1-771-884-11	SWITCH, TACTILE (WITH LED)	(DISC (PRST) –)
S906	1-771-884-11	SWITCH, TACTILE (WITH LED) (EQ7)	
S907	1-771-884-11	SWITCH, TACTILE (WITH LED) (MBP)	
**********			
*	1-659-835-12	LIMIT BOARD	
		**********	
		< SWITCH >	
SW3	1-572-688-11	SWITCH, PUSH (1 KEY) (LIMIT)	
**********			
*	1-659-837-11	LOAD BOARD	
		**********	
		< SWITCH >	
SW4	1-572-288-21	SWITCH, PUSH (DOWN)	
**********			
*	A-3326-835-A	MAIN BOARD, COMPLETE (L550X)	
*	A-3326-838-A	MAIN BOARD, COMPLETE (L550V)	
*	A-3326-843-A	MAIN BOARD, COMPLETE (L550)	
		**********	
*	3-040-998-01	BRACKET (IC)	
*	3-041-011-01	HEAT SINK (REG)	
*	3-223-780-01	HEAT SINK	
*	3-223-783-11	CHASSIS (BACK)	
	7-685-647-79	SCREW +BVTP 3X10 TYPE 2 N-S	
	7-685-793-09	SCREW +PTT 2.6X8 (S)	
	7-685-794-09	SCREW +PTT 2.6X10 (S)	
	7-685-797-09	SCREW +PTT 2.6X16 (S)	
		< CAPACITOR >	

C11	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C14	1-124-584-00	ELECT	100uF	20%	10V
C15	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C16	1-124-584-00	ELECT	100uF	20%	10V
C21	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C22	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C23	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C24	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C25	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C26	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V

MAIN

Ref. No.	Part No.	Description			Remark
C27	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C28	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C29	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C31	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C32	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C33	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C41	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C42	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C51	1-124-589-11	ELECT	47uF	20%	16V
C52	1-107-725-11	CERAMIC CHIP	0.1uF	10%	16V
C53	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C54	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C55	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C56	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C57	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C58	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C59	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C61	1-164-346-11	CERAMIC CHIP	1uF		16V
C62	1-163-135-00	CERAMIC CHIP	560PF	5%	50V
C63	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C64	1-164-346-11	CERAMIC CHIP	1uF		16V
C301	1-126-153-11	ELECT	22uF	20%	6.3V
C302	1-126-153-11	ELECT	22uF	20%	6.3V
C303	1-126-153-11	ELECT	22uF	20%	6.3V
C305	1-124-584-00	ELECT	100uF	20%	10V
C331	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C332	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C341	1-126-153-11	ELECT	22uF	20%	6.3V
C342	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C343	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C401	1-124-589-11	ELECT	47uF	20%	16V
C402	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C403	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C404	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C405	1-124-233-11	ELECT	10uF	20%	16V
C407	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C411	1-126-160-11	ELECT	1uF	20%	50V
C412	1-126-160-11	ELECT	1uF	20%	50V
C413	1-126-160-11	ELECT	1uF	20%	50V
C414	1-126-160-11	ELECT	1uF	20%	50V
C430	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C431	1-124-233-11	ELECT	10uF	20%	16V
C433	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C434	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C435	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C440	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C441	1-124-233-11	ELECT	10uF	20%	16V
C442	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C444	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C445	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C450	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C451	1-124-233-11	ELECT	10uF	20%	16V
C453	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C454	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C455	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C460	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C461	1-124-233-11	ELECT	10uF	20%	16V
C463	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C464	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C465	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C471	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C474	1-124-259-11	ELECT	4.7uF	20%	35V
C475	1-124-233-11	ELECT	10uF	20%	16V
C479	1-124-589-11	ELECT	47uF	20%	16V
C501	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C504	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C505	1-163-234-11	CERAMIC CHIP	20PF	5%	50V
C506	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C507	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C510	1-124-584-00	ELECT	100uF	20%	10V
C511	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C512	1-126-153-11	ELECT	22uF	20%	6.3V
C551	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C601	1-135-473-21	ELECT	3300uF	20%	16V
C602	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C611	1-126-157-11	ELECT	10uF	20%	16V
C612	1-126-157-11	ELECT	10uF	20%	16V
C613	1-126-157-11	ELECT	10uF	20%	16V
C614	1-126-157-11	ELECT	10uF	20%	16V
C617	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C618	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C622	1-125-710-11	DOUBLE LAYERS	0.1F		5.5V
C631	1-126-160-11	ELECT	1uF	20%	50V
C661	1-163-038-11	CERAMIC CHIP	0.1uF		25V (L550V)
C662	1-124-233-11	ELECT	10uF	20%	16V
C710	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C711	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C712	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C713	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V

< CONNECTOR >

CN701	1-784-456-11	CONNECTOR, FFC/FPC 14P
CNP301	1-764-617-12	PIN, CONNECTOR (PC BOARD) 30P
CNP601	1-774-701-11	PIN, CONNECTOR 16P

< DIODE >

D21	8-719-073-01	DIODE MA111-(K8).S0
D22	8-719-073-01	DIODE MA111-(K8).S0
D23	8-719-976-99	DIODE DTZ5.1B
D331	8-719-056-84	DIODE UDZ-TE-17-7.5B
D332	8-719-056-83	DIODE UDZ-TE-17-6.8B
D341	8-719-158-15	DIODE RD5.6SB
D471	8-719-081-83	DIODE CRG01(TE85L)
D472	8-719-081-83	DIODE CRG01(TE85L)
D473	8-719-081-83	DIODE CRG01(TE85L)

Ref. No.	Part No.	Description	Remark
D474	8-719-081-83	DIODE CRG01(TE85L)	
D475	8-719-081-83	DIODE CRG01(TE85L)	
D476	8-719-081-83	DIODE CRG01(TE85L)	
D477	8-719-081-83	DIODE CRG01(TE85L)	
D478	8-719-081-83	DIODE CRG01(TE85L)	
D479	8-719-073-01	DIODE MA111-(K8).S0	
D551	8-719-056-84	DIODE UDZ-TE-17-7.5B	
D556	8-719-056-93	DIODE UDZ-TE-17-18B	
D601	8-719-049-38	DIODE 1N5404TU	
D609	8-719-056-83	DIODE UDZ-TE-17-6.8B	
D610	8-719-056-65	DIODE 1SS372-TE85L	
D611	8-719-053-18	DIODE 1SR154-400TE-25	
D612	8-719-053-18	DIODE 1SR154-400TE-25	
D613	8-719-053-18	DIODE 1SR154-400TE-25	
D614	8-719-053-18	DIODE 1SR154-400TE-25	
D621	8-719-067-56	DIODE MA112-TX	
D662	8-719-056-88	DIODE UDZ-TE-17-11B (L550V)	
D671	8-719-073-01	DIODE MA111-(K8).S0	
D701	8-719-073-01	DIODE MA111-(K8).S0	
D710	8-719-078-81	DIODE DF5A6.8FU(TE85R)	
D711	8-719-078-81	DIODE DF5A6.8FU(TE85R)	
D713	8-719-056-83	DIODE UDZ-TE-17-6.8B	
D714	8-719-056-93	DIODE UDZ-TE-17-18B	
D720	8-719-056-83	DIODE UDZ-TE-17-6.8B	
		< IC >	
IC20	8-759-909-71	IC BA4558F-E2	
IC51	8-759-492-59	IC SAA6588T/V2-118	
IC401	8-759-827-13	IC TDA7406T	
IC404	8-759-827-14	IC TA8268AH	
IC501	6-800-078-01	IC MN101C49KTH1	
IC601	8-759-661-47	IC BA4908-V3	
IC602	8-759-682-69	IC XC61CN4302MR	
		< JACK >	
J10	1-815-185-11	JACK (ANTENNA)	
J561	1-566-822-41	JACK (REMOTE IN)	
		< JUMPER RESISTOR >	
JC1	1-216-295-11	SHORT 0	
JC2	1-216-295-11	SHORT 0	
JC3	1-216-295-11	SHORT 0	
JC6	1-216-295-11	SHORT 0	
JC8	1-216-295-11	SHORT 0	
JC9	1-216-296-11	SHORT 0	
JC10	1-216-295-11	SHORT 0	
JC12	1-216-295-11	SHORT 0	
		< COIL >	
L10	1-410-509-11	INDUCTOR 10uH	
L50	1-410-509-11	INDUCTOR 10uH	
L500	1-419-476-11	COIL, CHOKE 250uH	
L501	1-410-509-11	INDUCTOR 10uH	

Ref. No.	Part No.	Description	Remark
		< JACK >	
PJ401	1-774-699-12	JACK, PIN 4P (AUDIO OUT FRONT/REAR)	
		< TRANSISTOR >	
Q21	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q22	8-729-900-53	TRANSISTOR DTC114EK	
Q331	8-729-021-82	TRANSISTOR 2SD2396K	
Q332	8-729-047-76	TRANSISTOR FMC2A-T148	
Q333	8-729-900-53	TRANSISTOR DTC114EK	
Q341	8-729-920-85	TRANSISTOR 2SD1664-QR	
Q431	8-729-920-21	TRANSISTOR DTC314TKH04	
Q441	8-729-920-21	TRANSISTOR DTC314TKH04	
Q451	8-729-920-21	TRANSISTOR DTC314TKH04	
Q461	8-729-920-21	TRANSISTOR DTC314TKH04	
Q478	8-729-900-53	TRANSISTOR DTC114EK	
Q479	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q551	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q556	8-729-900-53	TRANSISTOR DTC114EK	
Q557	8-729-900-53	TRANSISTOR DTC114EK	
Q631	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q651	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q660	8-729-903-46	TRANSISTOR 2SB1132-P (L550/L550X)	
Q661	8-729-019-00	TRANSISTOR 2SD2394-G (L550V)	
Q662	8-729-047-76	TRANSISTOR FMC2A-T148	
Q663	8-729-047-76	TRANSISTOR FMC2A-T148	
Q664	8-729-027-23	TRANSISTOR DTA114EKA-T146	
		< RESISTOR >	
R21	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R22	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R23	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R24	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R25	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R26	1-216-025-11	RES-CHIP 100 5% 1/10W	
R27	1-216-097-11	RES-CHIP 100K 5% 1/10W	
R28	1-216-121-11	RES-CHIP 1M 5% 1/10W	
R29	1-216-025-11	RES-CHIP 100 5% 1/10W	
R31	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	
R32	1-216-097-11	RES-CHIP 100K 5% 1/10W	
R41	1-216-089-11	RES-CHIP 47K 5% 1/10W	
R52	1-216-113-00	METAL CHIP 470K 5% 1/10W	
R53	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R54	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R56	1-216-001-00	METAL CHIP 10 5% 1/10W	
R57	1-216-041-00	METAL CHIP 470 5% 1/10W	
R60	1-216-001-00	METAL CHIP 10 5% 1/10W	
R331	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
R332	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
R333	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
R341	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R342	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R403	1-216-089-11	RES-CHIP 47K 5% 1/10W	

MAIN

Ref. No.	Part No.	Description			Remark
R431	1-216-033-00	METAL CHIP	220	5%	1/10W
R432	1-216-089-11	RES-CHIP	47K	5%	1/10W
R433	1-216-025-11	RES-CHIP	100	5%	1/10W
R441	1-216-033-00	METAL CHIP	220	5%	1/10W
R442	1-216-089-11	RES-CHIP	47K	5%	1/10W
R443	1-216-025-11	RES-CHIP	100	5%	1/10W
R451	1-216-033-00	METAL CHIP	220	5%	1/10W
R452	1-216-089-11	RES-CHIP	47K	5%	1/10W
R453	1-216-025-11	RES-CHIP	100	5%	1/10W
R461	1-216-033-00	METAL CHIP	220	5%	1/10W
R462	1-216-089-11	RES-CHIP	47K	5%	1/10W
R463	1-216-025-11	RES-CHIP	100	5%	1/10W
R464	1-216-295-11	SHORT	0		
R471	1-216-089-11	RES-CHIP	47K	5%	1/10W
R472	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R473	1-216-049-11	RES-CHIP	1K	5%	1/10W
R474	1-216-073-00	METAL CHIP	10K	5%	1/10W
R479	1-216-017-11	RES-CHIP	47	5%	1/10W
R501	1-216-081-00	METAL CHIP	22K	5%	1/10W
R502	1-216-295-11	SHORT	0		
R503	1-216-097-11	RES-CHIP	100K	5%	1/10W
R504	1-216-049-11	RES-CHIP	1K	5%	1/10W
R505	1-216-049-11	RES-CHIP	1K	5%	1/10W
R506	1-216-049-11	RES-CHIP	1K	5%	1/10W
R507	1-216-089-11	RES-CHIP	47K	5%	1/10W
R508	1-216-097-11	RES-CHIP	100K	5%	1/10W
R509	1-216-025-11	RES-CHIP	100	5%	1/10W
R510	1-216-025-11	RES-CHIP	100	5%	1/10W
R511	1-216-025-11	RES-CHIP	100	5%	1/10W
R512	1-216-025-11	RES-CHIP	100	5%	1/10W
R513	1-216-025-11	RES-CHIP	100	5%	1/10W
R514	1-216-025-11	RES-CHIP	100	5%	1/10W
R515	1-216-025-11	RES-CHIP	100	5%	1/10W
R516	1-216-025-11	RES-CHIP	100	5%	1/10W
R517	1-216-097-11	RES-CHIP	100K	5%	1/10W
R519	1-216-105-11	RES-CHIP	220K	5%	1/10W
R521	1-216-097-11	RES-CHIP	100K	5%	1/10W
R523	1-216-097-11	RES-CHIP	100K	5%	1/10W
R524	1-216-073-00	METAL CHIP	10K	5%	1/10W
R525	1-216-073-00	METAL CHIP	10K	5%	1/10W
R526	1-216-073-00	METAL CHIP	10K	5%	1/10W
R527	1-216-073-00	METAL CHIP	10K	5%	1/10W
R531	1-216-097-11	RES-CHIP	100K	5%	1/10W (L550V)
R533	1-216-097-11	RES-CHIP	100K	5%	1/10W (L550V/L550X)
R534	1-216-097-11	RES-CHIP	100K	5%	1/10W (L550/L550X)
R536	1-216-097-11	RES-CHIP	100K	5%	1/10W (L550)
R537	1-216-097-11	RES-CHIP	100K	5%	1/10W
R538	1-216-097-11	RES-CHIP	100K	5%	1/10W
R539	1-216-097-11	RES-CHIP	100K	5%	1/10W
R540	1-216-097-11	RES-CHIP	100K	5%	1/10W
R541	1-216-097-11	RES-CHIP	100K	5%	1/10W
R544	1-216-097-11	RES-CHIP	100K	5%	1/10W
R551	1-216-049-11	RES-CHIP	1K	5%	1/10W
R555	1-216-105-11	RES-CHIP	220K	5%	1/10W
R556	1-216-049-11	RES-CHIP	1K	5%	1/10W
R557	1-216-105-11	RES-CHIP	220K	5%	1/10W
R609	1-216-049-11	RES-CHIP	1K	5%	1/10W
R631	1-216-073-00	METAL CHIP	10K	5%	1/10W
R632	1-216-089-11	RES-CHIP	47K	5%	1/10W
R633	1-216-089-11	RES-CHIP	47K	5%	1/10W
R634	1-216-065-11	RES-CHIP	4.7K	5%	1/10W
R635	1-216-073-00	METAL CHIP	10K	5%	1/10W
R636	1-216-097-11	RES-CHIP	100K	5%	1/10W
R651	1-216-049-11	RES-CHIP	1K	5%	1/10W
R652	1-216-089-11	RES-CHIP	47K	5%	1/10W
R653	1-216-073-00	METAL CHIP	10K	5%	1/10W
R654	1-216-073-00	METAL CHIP	10K	5%	1/10W
R660	1-216-061-00	METAL CHIP	3.3K	5%	1/10W (L550/L550X)
R661	1-216-037-00	METAL CHIP	330	5%	1/10W (L550V)
R662	1-249-393-11	CARBON	10	5%	1/4W (L550/L550X)
R663	1-249-393-11	CARBON	10	5%	1/4W (L550/L550X)
R664	1-249-393-11	CARBON	10	5%	1/4W (L550/L550X)
R665	1-249-393-11	CARBON	10	5%	1/4W (L550/L550X)
R666	1-216-029-00	METAL CHIP	150	5%	1/10W
R667	1-216-029-00	METAL CHIP	150	5%	1/10W
R668	1-216-029-00	METAL CHIP	150	5%	1/10W
R671	1-216-025-11	RES-CHIP	100	5%	1/10W
R672	1-216-025-11	RES-CHIP	100	5%	1/10W
R673	1-216-675-00	METAL CHIP	10K	0.5%	1/10W
R700	1-216-025-11	RES-CHIP	100	5%	1/10W
R701	1-216-675-00	METAL CHIP	10K	0.5%	1/10W
R702	1-216-675-00	METAL CHIP	10K	0.5%	1/10W
R710	1-216-025-11	RES-CHIP	100	5%	1/10W
R711	1-216-025-11	RES-CHIP	100	5%	1/10W
R712	1-216-025-11	RES-CHIP	100	5%	1/10W
R713	1-216-025-11	RES-CHIP	100	5%	1/10W
R714	1-216-025-11	RES-CHIP	100	5%	1/10W
R715	1-216-025-11	RES-CHIP	100	5%	1/10W
R719	1-216-049-11	RES-CHIP	1K	5%	1/10W
		< SWITCH >			
S701	1-771-540-11	SWITCH, PUSH (1 KEY) (NOSE DET)			
S702	1-692-431-21	SWITCH, TACTILE (RESET)			
		< TUNER >			
TU10	A-3282-061-A	TUNER UNIT (TUX-020)			

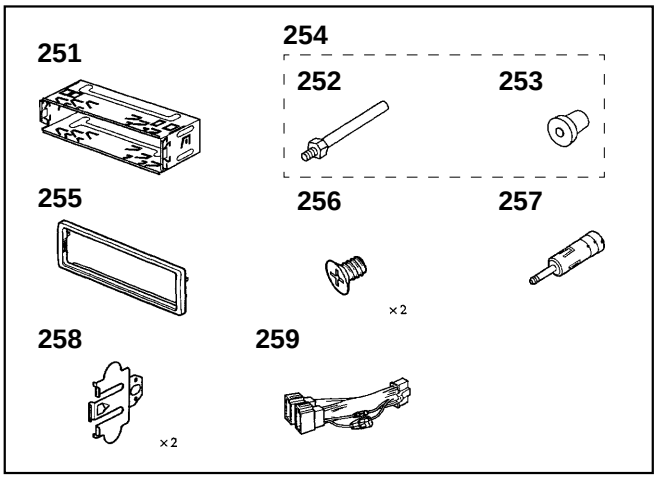
Ref. No.	Part No.	Description			Remark
		< VIBRATOR >			
X51	1-579-242-41	VIBRATOR, CRYSTAL (4.332MHz)			
X501	1-795-165-11	VIBRATOR, CERAMIC (18.43MHz)			
X502	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)			
**********					
*	A-3283-047-A	SERVO BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C1	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C3	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C4	1-104-609-11	ELECT CHIP	100uF	20%	4V
C5	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C6	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C7	1-126-394-11	ELECT CHIP	10uF	20%	16V
C8	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C9	1-162-924-11	CERAMIC CHIP	56PF	5%	50V
C10	1-162-924-11	CERAMIC CHIP	56PF	5%	50V
C11	1-162-909-11	CERAMIC CHIP	4PF	0.25PF	50V
C13	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C14	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C15	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C16	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C17	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C18	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C19	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C20	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C21	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C22	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C23	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C24	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C25	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C26	1-126-391-11	ELECT CHIP	47uF	20%	6.3V
C27	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C28	1-126-391-11	ELECT CHIP	47uF	20%	6.3V
C29	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C30	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C31	1-126-391-11	ELECT CHIP	47uF	20%	6.3V
C34	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C35	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C36	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C37	1-126-393-11	ELECT CHIP	33uF	20%	10V
C38	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C39	1-126-391-11	ELECT CHIP	47uF	20%	6.3V
C40	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C41	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C43	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C44	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
		< CONNECTOR >			
CN1	1-764-616-12	HOUSING, CONNECTOR (PC BOARD) 30P			
CN2	1-794-153-21	CONNECTOR, FPC (ZIF) 16P			

Ref. No.	Part No.	Description			Remark
CN3	1-770-347-21	CONNECTOR, FPC 6P			
		< JUMPER RESISTOR >			
FB1	1-216-864-11	SHORT	0		
FB2	1-216-864-11	SHORT	0		
FB4	1-216-864-11	SHORT	0		
FB5	1-216-295-11	SHORT	0		
FB6	1-216-864-11	SHORT	0		
FB7	1-216-864-11	SHORT	0		
		< IC >			
IC1	8-759-699-98	IC uPD63711GC-8EU			
IC2	8-759-658-87	IC BA5810FP-E2			
		< TRANSISTOR >			
Q1	8-729-904-87	TRANSISTOR 2SB1197K-T-146-R			
		< RESISTOR >			
R3	1-216-797-11	METAL CHIP	10	5%	1/16W
R5	1-218-344-11	RES-CHIP	7.5K	5%	1/16W
R6	1-216-837-11	METAL CHIP	22K	5%	1/16W
R7	1-216-839-11	METAL CHIP	33K	5%	1/16W
R8	1-216-833-11	METAL CHIP	10K	5%	1/16W
R9	1-216-840-11	METAL CHIP	39K	5%	1/16W
R10	1-216-835-11	METAL CHIP	15K	5%	1/16W
R12	1-216-837-11	METAL CHIP	22K	5%	1/16W
R14	1-216-841-11	METAL CHIP	47K	5%	1/16W
R15	1-216-841-11	METAL CHIP	47K	5%	1/16W
R17	1-216-809-11	METAL CHIP	100	5%	1/16W
R18	1-216-809-11	METAL CHIP	100	5%	1/16W
R19	1-216-809-11	METAL CHIP	100	5%	1/16W
R20	1-216-809-11	METAL CHIP	100	5%	1/16W
R21	1-216-821-11	METAL CHIP	1K	5%	1/16W
R22	1-216-821-11	METAL CHIP	1K	5%	1/16W
R24	1-216-864-11	SHORT	0		
R25	1-216-864-11	SHORT	0		
R26	1-216-797-11	METAL CHIP	10	5%	1/16W
R29	1-216-833-11	METAL CHIP	10K	5%	1/16W
R30	1-216-833-11	METAL CHIP	10K	5%	1/16W
R31	1-216-789-11	METAL CHIP	2.2	5%	1/16W
		< VIBRATOR >			
X1	1-781-759-21	VIBRATOR, CERAMIC (CHIP TYPE) (16.9344MHz)			
**********					
*	1-659-834-11	SUB BOARD			
		**********			
		< CONNECTOR >			
CN1	1-770-347-21	CONNECTOR, FPC 6P			
**********					

SUB (CD)

Ref. No.	Part No.	Description	Remark
*	1-680-762-11	SUB (CD) BOARD	
		**********	
*	3-039-443-11	SHEET (CONNECTOR)	
		< CONNECTOR >	
CNP801	1-794-064-12	SOCKET, CONNECTOR 14P	
CNP802	1-792-195-11	CABLE, FLEXIBLE FLAT (14 CORE)	
		< DIODE >	
LED801	8-719-082-38	LED CL-270SR-C-TS (INSERT MARK)	(L550V/L550X)
LED801	8-719-082-40	LED CL-270FG-C-TS (INSERT MARK) (L550)	
		< SWITCH >	
LSW801	1-771-883-11	SWITCH, TACTILE (WITH LED) (⏏)	(L550V/L550X)
LSW801	1-786-113-11	SWITCH, TACTILE (WITH LED) (⏏) (L550)	
**********			
		MISCELLANEOUS	
		**********	
9	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER)	
201	X-3378-598-1	CHASSIS (OP) ASSY (including M901)	
207	1-659-880-11	MOTOR FLEXIBLE BOARD	
⚠210	8-820-103-03	PICK-UP, OPTICAL KSS-720A/K1RP	
212	1-676-707-21	PICK-UP FLEXIBLE BOARD	
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
M902	A-3291-674-A	MOTOR ASSY, SLED (SLED)	
M903	A-3315-039-A	MOTOR SUB ASSY, LD (LOADING)	
**********			
		ACCESSORIES & PACKING MATERIALS	
		**********	
	3-227-661-11	MANUAL, INSTRUCTION (ENGLISH,FRENCH, GERMAN,DUTCH,ITALIAN)	
	3-227-661-21	MANUAL, INSTRUCTION (ENGLISH,SPANISH, SWEDISH,PORTUGUESE,GREEK,RUSSIAN)	
	3-227-661-31	MANUAL, INSTRUCTION (ENGLISH,CZECH, POLISH,TURKISH,RUSSIAN)	
	3-227-676-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH,GERMAN,DUTCH,ITALIAN)	
	3-227-676-21	MANUAL, INSTRUCTION, INSTALL (ENGLISH, SPANISH,SWEDISH,PORTUGUESE, GREEK,RUSSIAN)	
	3-227-676-31	MANUAL, INSTRUCTION, INSTALL (ENGLISH, CZECH,POLISH,TURKISH,RUSSIAN)	
	X-3378-490-1	CASE (PANEL) ASSY (for FRONT PANEL)	
**********			

Ref. No.	Part No.	Description	Remark
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-790-01	SCREW +PTT 2.6X4 (S)	
#2	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#3	7-621-772-20	SCREW +B 2X5	
#4	7-685-647-79	SCREW +BVTP 3X10 TYPE 2 N-S	
#5	7-685-794-09	SCREW +PTT 2.6X10 (S)	
#6	7-685-793-09	SCREW +PTT 2.6X8 (S)	
#7	7-685-797-09	SCREW +PTT 2.6X16 (S)	
#8	7-685-106-19	SCREW +P 2X10 TYPE 2 NON-SLIT	
#9	7-627-553-37	SCREW, PRECISION +P 2X3 TYPE 3	
#10	7-627-553-17	SCREW, PRECISION +P 2X2 TYPE 3	
#11	7-628-253-00	SCREW +PS 2X4	
#12	7-627-850-28	SCREW, PRECISION +P 1.4X3	
**********			
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
251	X-3373-602-1	FRAME ASSY	
252	3-386-828-01	SCREW, FITTING	
253	3-349-410-01	BUSHING	
254	X-3366-405-1	SCREW ASSY (EXP), FITTING	
255	3-040-979-02	COLLAR	
256	3-934-325-01	SCREW, +K (5X8) TAPPING	
257	1-465-459-21	ADAPTOR, ANTENNA	
258	3-233-644-01	SPRING, FITTING	
259	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER)	



The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

MEMO

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.1	2001. 06	Change of Part No. for SPRING, FITTING (ECN-CSA04727)
1.0	2001. 01	New